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THE DMSP/MFR TOTAL OZONE AND
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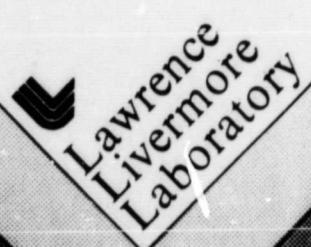
J. S. Ellis, J. E. Lovill,
F. M. Luther, T. J. Sullivan,
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THE DMSP/MFR TOTAL OZONE AND RADIANCE DATA BASE

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January 1983

1. INTRODUCTION

The radiance measurements by the multichannel filter radiometer (MFR), a scanning instrument carried on the Defense Meteorological Satellite Program (DMSP) Block 5D series of satellites (flight models F1, F2, F3 and F4), were used to calculate the total column ozone globally for the period March 1977 through February 1980. The infrared MFR sensors made both daytime and nighttime observations, thus permitting a possible 67,500 observations every 24 hours by each satellite. These MFR instruments were unique in that they each had a channel for measurement of upwelling radiation in the 9.6 μm band of ozone.

Uncalibrated radiance data on magnetic tape were sent to Lawrence Livermore National Laboratory (LLNL) throughout the data period from the Air Force Global Weather Center (AFGWC). These data were then calibrated and mapped to earth coordinates at LLNL. We derived total column ozone from these calibrated radiance data (Lovill et al., 1978, 1983; Luther, 1980) and placed both the ozone and calibrated radiance data into a computer data base called SOAC (Satellite Ozone Analysis Center). The uncalibrated radiance data tapes were initially sent on to the National Climate Center, Asheville, North Carolina and then to the Satellite

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Data Services Branch /EDS/NOAA, Suitland, Maryland where they were archived. Copies of the data base containing the total ozone and the calibrated radiance data reside both at LLNL and at the National Space Science Data Center, NASA Goddard Space Flight Center, Greenbelt, Maryland.

The data base was constructed on a VAX 11/780 computer with a VMS operating system using the FRAMIS code, a relational data base manager. The data base can be implemented on any VAX system with a VMS operating system providing that the system has sufficient disc space to hold one day of data, i.e., approximately 25,000 blocks on a disk are required to contain the largest data day. The FRAMIS code and its documentation are available from the National Energy Software Center, Argonne, Illinois.

The purpose of this report is to describe the entries into the data base in sufficient detail so that the data base might be useful to others. The characteristics of the MFR sensor are briefly discussed and a complete index to the data base tapes is given.

2. THE MFR DATA

The DMSP Block 5D series satellites, flight models F1, F2, F3 and F4, which carried an MFR with a channel sensing in the $9.6 \mu\text{m}$ ozone band, were in an approximately 835 km altitude, near polar, sun-synchronous orbits. The local overpass time varied between satellites (Table 1). The operational lifetimes of these satellites also varied. The data period for F1 was shortest with 6 months of intermittent data receipts. The F2 data period was continuous for 2-1/2 years, including and extending beyond the F3 and F4 data periods. During the period from mid-June 1979 through December 1979, the three satellites, F2, F3 and F4, continuously provided data.

TABLE 1. The Data Periods Covered by the MFR Sensors on the Defense Meteorological Satellites.

| Defense Meteorological Satellite | Data Period | Local Equatorial Overpass Time | Local AM Orbit |
|----------------------------------|-----------------------------|--------------------------------|----------------|
| F1 | March 1977 - July 1977 | ~ 12 (AM;PM) | Ascending* |
| F2 | July 1977 - February 1980 | ~ 8-10 (AM;PM) | Ascending |
| F3 | August 1978 - December 1979 | ~ 7 (AM;PM) | Ascending |
| F4 | June 1979 - December 1979 | ~ 10 (AM;PM) | Descending |

*Moving from south to north

The MFR scanned across the satellite ground track every 32 seconds in 25 steps at every 4 degrees of scan angle (± 48 degrees from nadir). The ground projection of the sampled area at each of the 25 scan positions and the spacing of the cross-track scans are shown in Fig. 1. The cross-track scanning capability of the MFR and its daytime and nighttime sampling capability permitted up to 67,500 observations daily by each satellite. However, the actual number of daily observations retained in the data base was less because of various reasons, including operational cycle, noisy data when a sensor system began to fail, insufficient disc space at AFGWC to contain multiple satellite data (occurred in start up of F2),

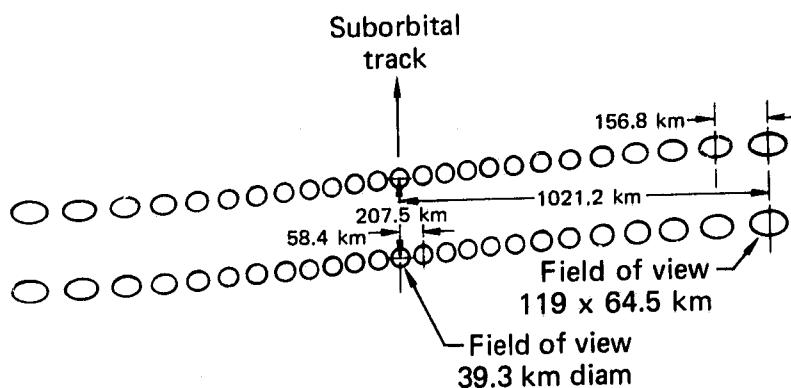


FIGURE 1. Earth-projected scan pattern for the MFR (after Nichols, 1975).

tapes being unreadable, failure of onboard satellite recorders, periodic satellite readout conflicts when multiple satellites were operational, and radiance values falling outside the range checks used during the total ozone calculation.

The satellite readout of the MFR data on all four satellites was on a continuous duty cycle. Out of a possible maximum of 1059 satellite-days of data, there are 991 days of data in the SOAC data base. There are but two extended temporal gaps in the 3-year data base; both occurred in the first half of 1977. These periods are March 31 to April 7, 1977 and May 16 to June 10, 1977, inclusive. These data losses occurred with the F1 satellite. There are 21 days of data intermittently missing from the data base in the second half of 1977. During the remaining period from January 1, 1978 to February 16, 1980, only 2 days of data are missing from the data base.

The F2 MFR daily data count was on the order of 50% or less of that possible for the first 3 months of its operation between July 13, 1977 and the last of October 1977. The computer disc space allocated by the AFGWC was not sufficient to hold both the data of the failing F1 MFR and the new F2 MFR data. Even with the reduced data counts, the F2 global coverage was quite good because either daytime or nighttime data were usually recovered. After October 1977, F2 had a high data rate (40,630 average daily count) and there were no significant losses of data.

The F2 satellite MFR had a lower maximum possible data count throughout the sensor's lifetime because a sun shield on the spacecraft blocked the field of view in the last four scan positions to right of the spacecraft direction of travel. Nevertheless, the data coverage was quite good (Fig. 2b). After the F4 satellite became operational in June 1979, there were three satellite MFR instruments operating at one time until the end of December 1979 when only the F2 MFR continued to operate. During this period, the F2 MFR data became lower priority. Whenever a satellite readout conflict occurred, the F2 MFR data count decreased.

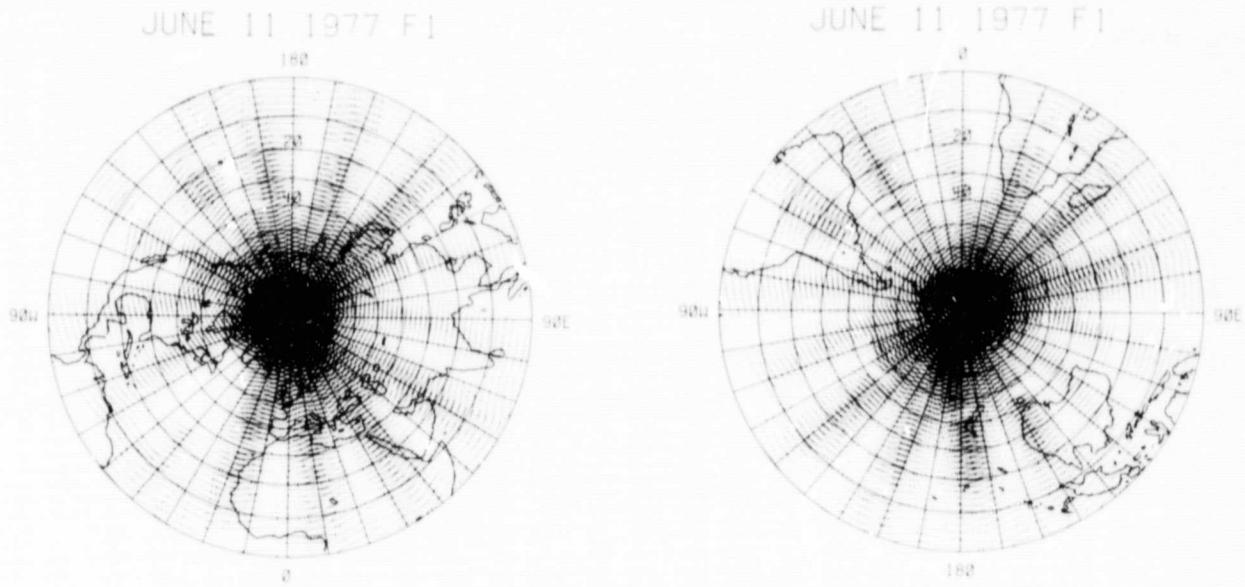


FIGURE 2a. Locations where total ozone retrievals were made during the 24-hour period of June 11, 1977, F1 satellite.

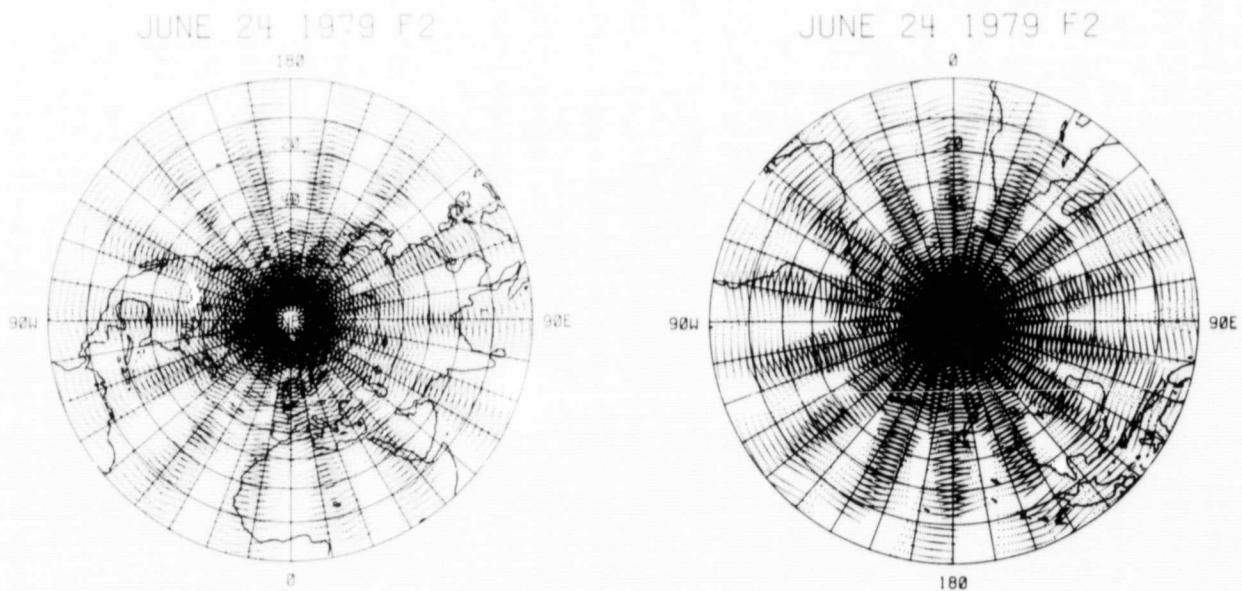


FIGURE 2b. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F2 satellite.

Thus, there were occasional days of F2 data with counts less than 50 percent of that possible.

The F3 MFR satellite generally provided 65 to 70 percent of the possible coverage during its lifetime because of a sun shield and an object(s) attached to the spacecraft which drifted through the field of view of the MFR during each orbit. The field of view in 8 to 9 scan positions was quite often obscured. However the F3 MFR coverage was still quite extensive (Figure 2c) with an average daily data count of 39,827. All 25 scan positions in the F4 MFR provided high quality data allowing high spatial sampling (Figure 2d). Data base data counts average 53,243 samples per day.

3. THE MFR CHARACTERISTICS

The MFR sensor measures upwelling radiances in 16 spectral bands. One channel is centered in the $9.6 \mu\text{m}$ O_3 bands, six channels are in the $15 \mu\text{m}$ CO_2 bands, one channel is in the so called atmospheric window near $12 \mu\text{m}$, and eight channels are in the water vapor rotation band (18 to $30 \mu\text{m}$). The nominal MFR channel characteristics are shown in Table 2; more specific channel characteristics for each satellite are presented in Appendix A.

The channels used to retrieve values of total ozone included the first three channels sensing in the $15 \mu\text{m}$ CO_2 band (1, 2, and 3), the atmospheric window channel (7), and the channel sensing in the $9.6 \mu\text{m}$ O_3 band (16). The three CO_2 channels sense IR radiation emitted from the upper, middle and lower stratosphere and the upper troposphere. The derivation of the method to calculate total ozone from these infrared radiances and the application of the method was first discussed in Lovill et al. (1978). Modifications were later made to the method as described in Luther (1980).

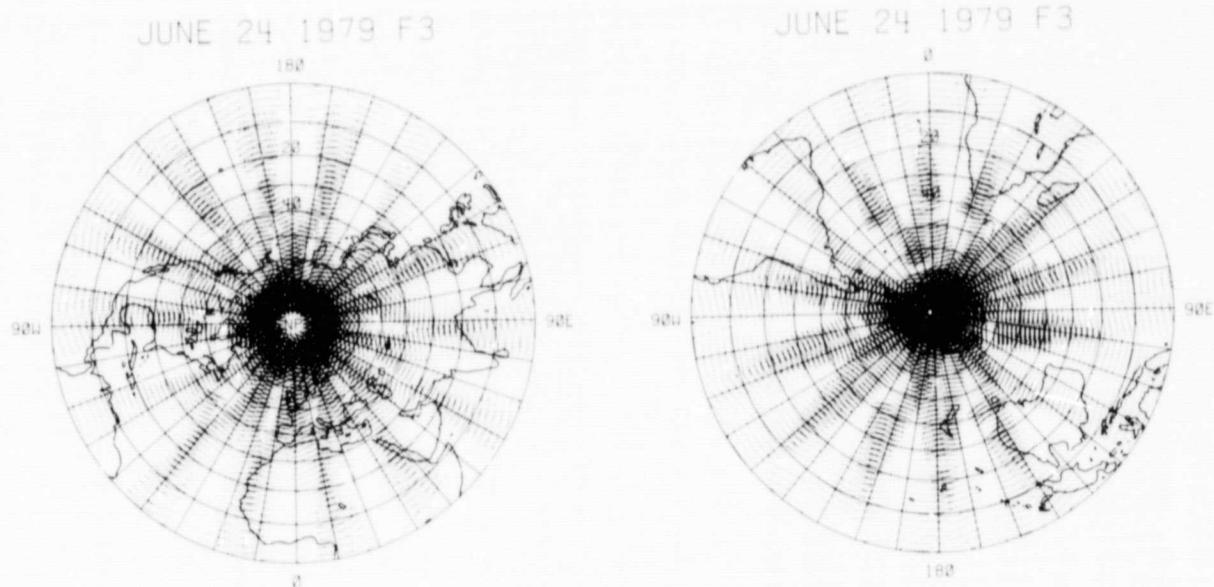


FIGURE 2c. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F3 satellite.

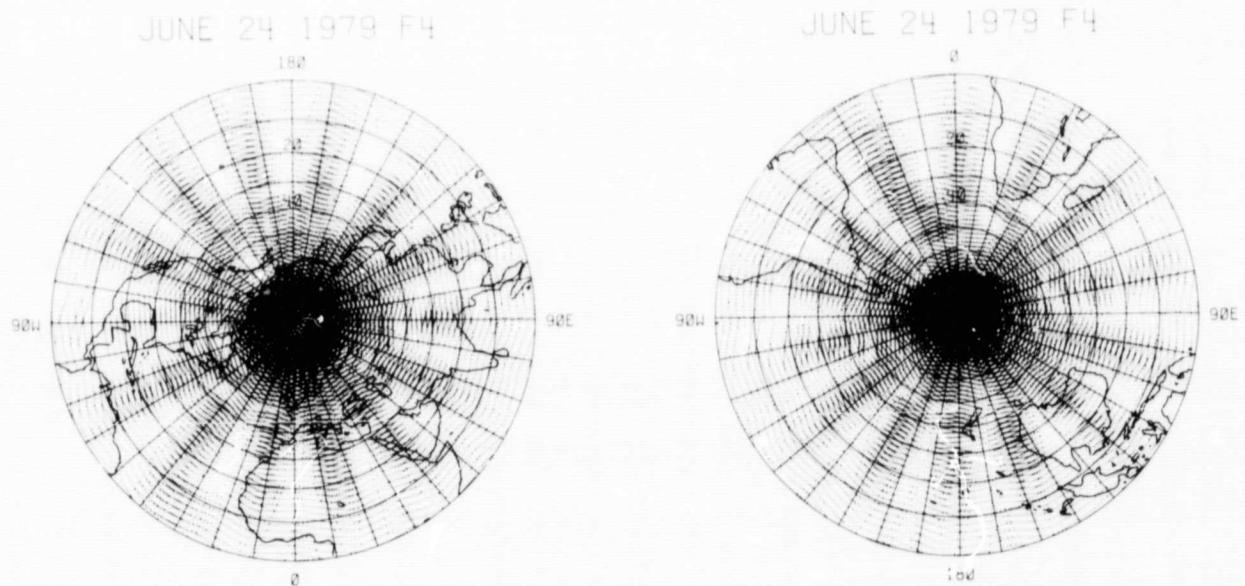


FIGURE 2d. Locations where total ozone retrievals were made during the 24-hour period of June 24, 1979, F4 satellite.

Table 2. Nominal MFR Channel Characteristics^a

| Channel Number | Center (μm) | Center (cm^{-1}) | Half Width (cm^{-1}) | Species | NESR ^b |
|----------------|-----------------------------|--------------------------------|------------------------------------|----------------------|-------------------|
| 1 | 15.0 | 668.5 | 3.5 | CO_2 | 0.30 |
| 2 | 14.8 | 676.0 | 10.0 | CO_2 | 0.09 |
| 3 | 14.4 | 695.0 | 10.0 | CO_2 | 0.10 |
| 4 | 14.1 | 708.0 | 10.0 | CO_2 | 0.11 |
| 5 | 13.8 | 725.0 | 10.0 | CO_2 | 0.11 |
| 6 | 13.4 | 747.0 | 10.0 | CO_2 | 0.12 |
| 7 | 12.0 | 835.0 | 8.0 | Window | 0.11 |
| 8 ^c | 18.7 | 535.0 | 16.0 | H_2O | 0.15 |
| 9 | 24.5 | 408.5 | 12.0 | H_2O | 0.14 |
| 10 | 22.7 | 441.5 | 18.0 | H_2O | 0.09 |
| 11 | 23.9 | 420.0 | 20.0 | H_2O | 0.12 |
| 12 | 26.7 | 374.0 | 12.0 | H_2O | 0.18 |
| 13 | 25.2 | 397.5 | 10.0 | H_2O | 0.16 |
| 14 | 28.2 | 355.4 | 15.0 | H_2O | 0.25 |
| 15 | 28.3 | 353.5 | 11.0 | H_2O | 0.33 |
| 16 | 9.8 | 1022.0 | 12.5 | O_3 | 0.05 |

^aAfter Nichols (1975)

^bNESR = Noise Equivalent Spectral Radiance in $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$.

^cNot on Flight Model 1.

The filter in channel 1 on the F1 MFR was found to have a wide band-pass leak; it was partially transparent to radiation upwelling from the lower troposphere and the earth's surface. The calibration of the channel 2 radiances of the MFR's on the F2, F3 and F4 satellites is suspect since the calibration source possibly did not fill the field of view for this channel during the calibration checks. This alignment problem resulted from a hardware change in these MFR's. Therefore, radiance data from channel 1 on the F1 MFR and from channel 2 on the F2, F3 and F4 MFR were not used in our ozone retrieval algorithm.

If data from one or more of the 5 channels that were used in calculating total ozone fell outside range checks, then none of the data from that sample location were placed into the data base. Occasionally the daily data count in the data base was larger than the theoretical maximum or larger than it should have been. This

happened because, occassionally, the data from a satellite orbit were duplicated in the input data set received at LLNL from the AFGWC. In the most obvious cases, the data were sorted and the duplicate data were removed.

4. THE MFR DATA BASE

Derived total column ozone and the MFR calibrated radiance data were placed into a user oriented data base, called SOAC, using the FRAMIS database manager. FRAMIS is an interactive, relational, data base management tool developed by the Data Management Group of the Computation Department at the Lawrence Livermore National Laboratory (Jones et al, 1981).

A version of the FRAMIS code (Taylor, 1981), which is compatible with a VAX computer and the VMS operating system, and the documentation required to implement and operate the FRAMIS code can be obtained from the:

National Energy Software Center
9700 South Cass Avenue
Argonne, Illinois 60439

A sample database called Wildlife, which is used extensively in the FRAMIS tutorial (Dittli, 1981), is also available from NESC.

The database structure may be thought of as a series of files called tables. Each table is made up of columns (the different variables) and rows (the data). A table, representing MFR satellite data from one day, has 36 columns in the SOAC data base. Each of the columns is defined in Table 3. Each row in the data base represents all of the data, as defined by the column names, from one MFR scan spot.

The rows of the data base have been sorted into 2.5 by 2.5 degree latitude and longitude data cells. These cells are represented by the column name "BOX". The first cell (1) is centered at the Greenwich Meridian and the South pole; the last cell

Table 3. Names and definition of the columns in the FRAMIS data base.

| | |
|-------|--|
| BOX | - a 2.5 degree latitude and longitude cell within the database |
| BIRD | - Satellite number (F1, F2, F3 or F4) |
| JDAY | - YYJJJ, YY is year and JJJ is the Julian day |
| TIME | - HHMMSS, Greenwich time (hours, minutes, seconds) |
| NDPOS | - Day-night and scan position indicator (+day, -night, ±1 to ±25 left to right) |
| LAT | - Latitude x 100 (+North, -South) |
| LONG | - Longitude x 100 (+East, -West) |
| OZONE | - Total column ozone in Dobson units (m.atm.cm) |
| ORBIT | - Satellite orbit number |
| CO2T1 | - Brightness temperature x 10 of CO2R1 (°K) |
| CO2T2 | - Brightness temperature x 10 of CO2R2 (°K) |
| CO2T3 | - Brightness temperature x 10 of CO2R3 (°K) |
| WINDT | - Brightness temperature x 10 of WIND (°K) |
| DT12 | - (CO2T1-CO2T2) x 100 |
| DT13 | - (CO2T1-CO2T3) x 100 |
| BAND | - Retrieval model band that data point is in (1 through 11) |
| BANDA | - Band blend indicator |
| ALPH | - Fractional weight assigned to the southern band model (BANDA) when band model blending is done x 100 |
| SEC | - Secant of the zenith angle x 10,000 |
| CO2R1 | - Channel 1 radiance x 100 mW/(m ² sr cm ⁻¹) |
| CO2R2 | - Channel 2 radiance x 100 mW/(m ² sr cm ⁻¹) |
| CO2R3 | - Channel 3 radiance x 100 mW/(m ² sr cm ⁻¹) |
| CO2R4 | - Channel 4 radiance x 100 mW/(m ² sr cm ⁻¹) |
| CO2R5 | - Channel 5 radiance x 100 mW/(m ² sr cm ⁻¹) |
| CO2R6 | - Channel 6 radiance x 100 mW/(m ² sr cm ⁻¹) |

Table 3. Continued.

| | | |
|-----------------------------------|---|-------------------------------|
| WIND1 - Channel 7 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | (Single look at scene) |
| WIND - Channel 7 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR1 - Channel 8 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR2 - Channel 9 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR3 - Channel 10 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR4 - Channel 11 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2O5 - Channel 12 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR6 - Channel 13 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR7 - Channel 14 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| H2OR8 - Channel 15 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | |
| O3R - Channel 16 radiance x 100 | $\text{mW}/(\text{m}^2 \text{ sr cm}^{-1})$ | (Avg. of 12 looks at a scene) |

NOTE: Channel radiances are the average of two looks at the view scene except as noted above.

(72144) is centered at 2.5 degrees west longitude and the North pole. The cell numbers increase from east to west (1 to 144) and south to north (0 to 72000). The algorithm used to compute a cell number from any latitude-longitude pair is as follows:

- a. Change the longitude from the standard (+) east and (-) west to (+) east longitude, (0 to 360 degrees east longitude).

IF (ALON.LT.0) ALON=ALON+360

- b. Change the latitude from the standard (+) north and (-) south to colatitude, where the south pole is zero and the north pole is 180 degrees.

ALAT = ALAT + 90

c. Calculate the cell (box) number.

```
IX = IFIX (ALON * 0.4 + 1.5)
```

```
IF (IX.GE.145) IX = 1
```

```
IY = IFIX(ALAT * 0.4 + 1.5)
```

```
BOX = (IY-1) * 1000 + IX
```

The SOAC database was built on a VAX 11/780 computer with a VMS operating system using the VAX FRAMIS code. A VAX computer with a VMS operating system using the VAX FRAMIS code is required to access the data in the SOAC data base. The data base resides on 109 nine track magnetic tapes written at 6250 bpi density. This data base is available to various users and can be obtained from:

National Space Science Data Center

Code 601.4

Goddard Space Flight Center

Greenbelt, MD 20771

Each file on a database tape contains the data for all of the satellites for one data-day. A data-day is 24 hours long beginning with 0000 Greenwich Mean Time (GMT). The data time is the time in GMT when the observation was taken by the satellite. These are denoted by the JDAY and TIME columns in the data base.

There are up to 10 files (days of data) on each data base tape. The file naming convention is SOACZYJJJ, where "Y" is the last digit of the year and JJJ is the Julian day. The label for each tape (volume number-ZYJJ) was constructed using the last digit of the year followed by the first two digits of the Julian day for the files on the tape, e.g. Z800 contains data for Julian days 1 through 9, 1978; Z801 contains data for Julian days 10 through 19, 1978, etc. and the name of the file containing the data for Julian day 1 on tape Z800 is SOACZ8001.FRM. A complete list of the tape labels, the data-days, and the data count by satellite is given in Appendix C.

Before using FRAMIS on a VAX computer, we typically establish a shorthand method for executing FRAMIS by defining a global variable as

FRAMIS :== RUN device:[directory]FRAMIS

where the lower case names represent names to be inserted by the user.

A file is moved from a database tape to a disc by using the commands

MOUNT device: tapelabel

COPY device : filename.FRM *.*

An interactive session using FRAMIS is begun by executing FRAMIS followed by two necessary replies to the FRAMIS prompt (i.e. >) :

FRAMIS

> CREATE SOAC ;

> INCLUDE filename ;

where filename is the name of the file containing the data for one day (e.g. SOACZ8001).

An example of a FRAMIS session that we have used to extract data by cell number is illustrated in Appendix B.

ACKNOWLEDGMENTS

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APPENDIX A

Table A-1. Optical properties of selected MFR channels

| DMSP Satellite | Channel number | Optical Center band width (cm ⁻¹) | Equivalent band width (cm ⁻¹) | Half-width of filter (cm ⁻¹) | Half power throughout (%) | Tenth-width of filter (cm ⁻¹) | Peak center (cm ⁻¹) | Peak Transmittance |
|----------------|----------------|---|---|--|---------------------------|---|---------------------------------|--------------------|
| F1 | 1 | 669.02 | 1.73 | 3.10 | 57.30 | 8.01 | 669.00 | 0.40 |
| | 2 | 678.30 | 6.92 | 11.62 | 85.65 | 16.86 | 679.90 | 0.59 |
| | 3 | 693.99 | 5.83 | 11.44 | 86.52 | 16.38 | 692.20 | 0.51 |
| | 4 | 708.10 | 5.44 | 9.99 | 87.15 | 14.11 | 711.00 | 0.53 |
| | 5 | 725.65 | 6.44 | 10.22 | 85.66 | 14.73 | 725.60 | 0.64 |
| | 6 | 746.82 | 5.18 | 9.57 | 79.86 | 15.52 | 747.10 | 0.54 |
| | 7 | 835.66 | 5.44 | 7.19 | 64.40 | 16.73 | 834.40 | 0.63 |
| | 16 | 1019.59 | 8.56 | 11.63 | 68.51 | 25.34 | 1020.00 | 0.63 |
| F2 | 1 | 668.57 | 1.34 | 2.93 | 57.39 | 7.92 | 668.50 | 0.32 |
| | 2 | 678.01 | 6.71 | 11.51 | 84.72 | 17.08 | 679.90 | 0.56 |
| | 3 | 694.00 | 5.89 | 11.53 | 86.59 | 16.39 | 692.16 | 0.52 |
| | 4 | 707.26 | 5.66 | 9.97 | 86.71 | 14.24 | 705.60 | 0.56 |
| | 5 | 724.33 | 5.57 | 9.66 | 82.65 | 14.87 | 724.20 | 0.57 |
| | 6 | 746.11 | 5.15 | 9.71 | 80.34 | 15.75 | 746.30 | 0.53 |
| | 7 | 834.57 | 6.03 | 8.36 | 70.90 | 16.89 | 833.70 | 0.65 |
| | 16 | 1019.06 | 8.46 | 11.54 | 69.13 | 25.06 | 1019.50 | 0.63 |
| F3 | 1 | 668.89 | 1.40 | 3.04 | 58.81 | 7.84 | 668.90 | 0.34 |
| | 2 | 677.87 | 5.06 | 11.67 | 85.27 | 17.17 | 679.30 | 0.44 |
| | 3 | 693.92 | 5.75 | 11.50 | 85.75 | 16.62 | 692.10 | 0.50 |
| | 4 | 707.93 | 5.62 | 9.87 | 85.79 | 14.29 | 706.40 | 0.55 |
| | 5 | 725.41 | 6.26 | 9.78 | 83.99 | 14.60 | 725.60 | 0.64 |
| | 6 | 747.62 | 5.29 | 9.71 | 81.38 | 15.34 | 747.80 | 0.55 |
| | 7 | 834.43 | 6.03 | 8.36 | 70.86 | 17.01 | 833.30 | 0.65 |
| | 16 | 1019.79 | 8.80 | 11.95 | 69.82 | 25.22 | 1020.00 | 0.64 |

Table A-1. Continued.

| DMSP Satellite | Channel number | Optical Center (cm ⁻¹) | Equivalent band width (cm ⁻¹) | Half-width of filter (cm ⁻¹) | Half power throughout (%) | Tenth-width of filter (cm ⁻¹) | Peak center (cm ⁻¹) | Peak Transmittance |
|----------------|----------------|------------------------------------|---|--|---------------------------|---|---------------------------------|--------------------|
| F4 | 1 | 668.45 | 1.55 | 3.13 | 60.82 | 8.14 | 668.40 | 0.38 |
| | 2 | 678.57 | 6.84 | 11.60 | 85.65 | 16.85 | 680.06 | 0.59 |
| | 3 | 693.93 | 5.78 | 11.43 | 86.48 | 16.28 | 692.00 | 0.51 |
| | 4 | 707.10 | 5.50 | 10.15 | 86.93 | 14.36 | 710.40 | 0.54 |
| | 5 | 724.16 | 5.55 | 9.72 | 83.69 | 14.58 | 724.20 | 0.58 |
| | 6 | 748.95 | 5.18 | 9.37 | 78.67 | 15.50 | 749.30 | 0.54 |
| | 7 | 835.02 | 5.52 | 8.37 | 70.52 | 17.33 | 833.90 | 0.59 |
| | 16 | 1021.09 | 11.10 | 14.01 | 75.85 | 25.88 | 1022.20 | 0.73 |

Table A-2. Optical centers of the water vapor channels.

| DMSP Satellite | Channel number | Optical center (cm $^{-1}$) |
|----------------|----------------|------------------------------|
| F1 | 9 | 356.27 |
| | 10 | 398.15 |
| | 11 | 418.29 |
| | 12 | 441.94 |
| | 13 | 410.08 |
| | 14 | 373.36 |
| F2 | 15 | 355.84 |
| | 8 | 534.50 |
| | 9 | 356.20 |
| | 10 | 398.80 |
| | 11 | 418.90 |
| | 12 | 441.90 |
| F3 | 13 | 407.30 |
| | 14 | 372.90 |
| | 15 | 355.20 |
| | 8 | 534.80 |
| | 9 | 356.30 |
| | 10 | 398.70 |
| F4 | 11 | 418.70 |
| | 12 | 443.60 |
| | 13 | 409.70 |
| | 14 | 374.00 |
| | 15 | 352.80 |
| | 8 | 534.80 |
| | 9 | 355.00 |
| | 10 | 399.40 |
| | 11 | 418.80 |
| | 12 | 442.10 |
| | 13 | 409.10 |
| | 14 | 375.20 |
| | 15 | 353.00 |

A P P E N D I X B

EXAMPLE OF A FRAMIS SESSION

```
$ SAVE$DIR := 'F$DIRECTORY()'
$ SET DEFAULT DPRD:[ TEST]
$ STARTUP:
$   ON CONTROL$Y THEN GOTO ALLDONE
$   ON WARNING THEN GOTO ALLDONE
$! ****
$! INCLUDE HERE APPROPRIATE BOX NUMBERS FOR EXTRACTION
$ OPEN/WRITE BOXFILE BOXFILE.DAT
$   WRITE BOXFILE " 60137"
$   WRITE BOXFILE " 56065"
$   WRITE BOXFILE " 52095"
$   CLOSE BOXFILE
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$   EDIT BOXFILE.DAT
EXIT
$   SET DEFAULT [ TEST]
$! ****
$! ESTABLISH FORMAT FILE FOR INPUTTING FRAMIS TABLE
$ OPEN/WRITE FMT BOXFILE.FMT
$   WRITE FMT "FIXED 1 CD 1"
$   WRITE FMT "BOX 2 5"
$   CLOSE FMT
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$   EDIT BOXFILE.FMT
EXIT
$   SET DEFAULT [ TEST]
$! ****
$! ESTABLISH TABLE IN FRAMIS
$! WRITE FRAMIS EXECUTE FILE WITH TABLENAME
$ OPEN/WRITE COMMAND BOXEXTR.CMD
$   WRITE COMMAND "CREATE SOAC;"
$   WRITE COMMAND "DELETE TABLE BOXFILE;"
$   WRITE COMMAND "DEFINE TABLE BOXFILE BOX INT 3;"
$   WRITE COMMAND "INPUT BOXFILE FROM BOXFILE.DAT "
$   WRITE COMMAND "USING FILE BOXFILE.FMT;"
$   WRITE COMMAND "BOXFILE=BOXFILE SORT BOX;"
$   WRITE COMMAND "PRINT BOXFILE;"
$   WRITE COMMAND "END;"
$   CLOSE COMMAND
$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$   EDIT BOXEXTR.CMD
EXIT
$   SET DEFAULT [ TEST]
$   FRAMIS
$   EXECUTE [ TEST]BOXEXTR.CMD;
$   SET DEFAULT [ TEST]
$   DELETE BOXEXTR.CMD.*
```

```
$! PROCESS FILES IN DIRECTORY
$ DIR/OUTPUT=[TEST]DTEMP.NAM/COLUMNS=1/NOHEAD/NOTRAIL -
      [TEST]SOACZ*.FRM
$ OPEN DDIR [TEST]DTEMP.NAM
$ LOOP:
$ READ/END $\sim$ OF $\sim$ FILE=ALLDONE DDIR DIRNAME
$ FOUNDONE:
$     START = 'F$LOCATE("]",DIRNAME)' + 1
$     LEN = 'F$LOCATE(".FRM",DIRNAME)' - START
$     DIRNAME := "'`F$EXTRACT(START,LEN,DIRNAME)`"
$     LEN = LEN - 5
$     DATE := "'`F$EXTRACT(5,LEN,DIRNAME)`"
$     IF DATE.GTS."9999" THEN GOTO ALLDONE
$! WRITE FRAMIS EXECUTE FILE WITH APPROPRIATE TABLE NAMES
$ OPEN/WRITE COMMAND BOXEXTR.CMD
$     WRITE COMMAND "OPEN SOAC;"
$     WRITE COMMAND "INCLUDE SOACZ`DATE`;"
$     WRITE COMMAND "TEMP = Z`DATE` JOIN BOXFILE ON BOX;"
$     WRITE COMMAND "TEMPOUT = TEMP "
$     WRITE COMMAND "PROJ LAT LONG TIME JDAY BIRD SEC C02R1 C02R2 "
$     WRITE COMMAND "C02R3 O3R WINDT OZONE;"
$     WRITE COMMAND "OUTPUT TEMPOUT WITH CONTROL TO Z`DATE`.DAT;"
$     WRITE COMMAND "DELETE TABLE TEMP TEMPOUT;"
$     WRITE COMMAND "DELETE TABLE Z`DATE`;"
$     WRITE COMMAND "END;"

$! EDIT FILE TO GET RID OF SEGMENTED RECORDS
$ CLOSE COMMAND
$ EDIT BOXEXTR.CMD
EXIT
$     SET DEFAULT [TEST]
$     FRAMIS
$ EXECUTE [TEST]BOXEXTR.CMD;
$     SET DEFAULT [TEST]
$     DELETE BOXEXTR.CMD.*
$     WRITE SYS$OUTPUT -
          " BOX EXTRACT COMPLETED NORMALLY FOR FILE ``DIRNAME``"
$     GOTO LOOP
$ ALLDONE:
$     SET DEFAULT [TEST]
$     CLOSE DDIR
$     DELETE DTEMP.NAM.*
$     DELETE SOAC*.FRM.1
$     DELETE BOXFILE.DAT.*
$     DELETE BOXFILE.FMT.1
$     SET DEFAULT 'SAVE&DIR'
$     EXIT
```

FRAMIS OUTPUT FROM SOAC DATABASE

FIXED 12 CD 2

| | | | | | | | | |
|-------|---------|--------------|-------|---|-------|------|------|------|
| LAT | 1 | 8 | 1 | | | | | |
| LONG | 10 | 8 | 1 | | | | | |
| TIME | 19 | 8 | 1 | | | | | |
| JDAY | 28 | 8 | 1 | | | | | |
| BIRD | 37 | 8 | 1 | | | | | |
| SEC | 46 | 8 | 1 | | | | | |
| CO2R1 | 55 | 8 | 1 | | | | | |
| CO2R2 | 64 | 8 | 1 | | | | | |
| CO2R3 | 73 | 8 | 1 | | | | | |
| O3R | 1 | 8 | 2 | | | | | |
| WINDT | 10 | 8 | 2 | | | | | |
| OZONE | 19 | 13 | 2 E 6 | | | | | |
| 4048 | -12444 | 45908 | 78004 | 2 | 18677 | 5700 | 4880 | 4469 |
| 3546 | 2740 | 3.545809E+02 | | | | | | |
| 4048 | -124448 | 45908 | 78004 | 2 | 18677 | 5700 | 4880 | 4469 |
| 3546 | 2740 | 3.545793E+02 | | | | | | |
| 3875 | -12542 | 45940 | 78004 | 2 | 18677 | 5655 | 4867 | 4416 |
| 2880 | 2553 | 3.252596E+02 | | | | | | |
| 3955 | -12536 | 144210 | 78004 | 2 | 12481 | 5471 | 4717 | 4345 |
| 2135 | 2284 | 3.171061E+02 | | | | | | |
| 3980 | -12446 | 144211 | 78004 | 2 | 11793 | 5412 | 4697 | 4311 |
| 1866 | 2227 | 3.276149E+02 | | | | | | |
| 5054 | 15995 | 100121 | 78004 | 2 | 13437 | 5986 | 5517 | 5265 |
| 2762 | 2500 | 4.571406E+02 | | | | | | |
| 4880 | 15881 | 100153 | 78004 | 2 | 13438 | 5911 | 5450 | 5207 |
| 2954 | 2660 | 4.503140E+02 | | | | | | |
| 6036 | -2009 | 62050 | 78004 | 2 | 16188 | 4773 | 3489 | 3266 |
| 1332 | 2108 | 2.712137E+02 | | | | | | |
| 5988 | -2025 | 80057 | 78004 | 2 | 11263 | 4612 | 3535 | 3318 |
| 1469 | 2160 | 2.756629E+02 | | | | | | |
| 6008 | -1893 | 80058 | 78004 | 2 | 11802 | 4642 | 3535 | 3302 |
| 1507 | 2174 | 2.740614E+02 | | | | | | |

A P P E N D I X , C

MFR DATA COUNT AND TAPE INDEX

| TAPE | JULDAY | DATE | SAT COUNT | SAT COUNT | SAT COUNT | SAT COUNT | SAT COUNT |
|------|--------|---------|------------|-----------|-----------|-----------|-----------|
| Z708 | 08477 | 3/25/77 | F1 = 21508 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 08577 | 3/26/77 | F1 = 16761 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 08677 | 3/27/77 | F1 = 17297 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 08877 | 3/29/77 | F1 = 24843 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 08977 | 3/30/77 | F1 = 38370 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z709 | 09877 | 4/ 8/77 | F1 = 13313 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 09977 | 4/ 9/77 | F1 = 70925 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z710 | 10077 | 4/10/77 | F1 = 44034 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10177 | 4/11/77 | F1 = 45165 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10277 | 4/12/77 | F1 = 25510 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10377 | 4/13/77 | F1 = 41684 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10477 | 4/14/77 | F1 = 33820 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10577 | 4/15/77 | F1 = 30709 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10677 | 4/16/77 | F1 = 30360 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10877 | 4/18/77 | F1 = 12090 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 10977 | 4/19/77 | F1 = 47050 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z711 | 11077 | 4/20/77 | F1 = 54769 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11177 | 4/21/77 | F1 = 60594 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11277 | 4/22/77 | F1 = 47069 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11377 | 4/23/77 | F1 = 45080 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11477 | 4/24/77 | F1 = 29342 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11577 | 4/25/77 | F1 = 5204 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11677 | 4/26/77 | F1 = 31733 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11777 | 4/27/77 | F1 = 51407 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11877 | 4/28/77 | F1 = 47032 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 11977 | 4/29/77 | F1 = 52142 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z712 | 12077 | 4/30/77 | F1 = 46376 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12177 | 5/ 1/77 | F1 = 53798 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12277 | 5/ 2/77 | F1 = 51285 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12377 | 5/ 3/77 | F1 = 42951 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12477 | 5/ 4/77 | F1 = 53730 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12577 | 5/ 5/77 | F1 = 35678 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12677 | 5/ 6/77 | F1 = 19474 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12777 | 5/ 7/77 | F1 = 41125 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12877 | 5/ 8/77 | F1 = 44344 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 12977 | 5/ 9/77 | F1 = 58992 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z713 | 13077 | 5/10/77 | F1 = 42431 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13177 | 5/11/77 | F1 = 56767 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13277 | 5/12/77 | F1 = 43945 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13377 | 5/13/77 | F1 = 47968 | F2 = 0 | F3 = 0 | F4 = 0 | |

| | | | | | | | |
|------|-------|---------|------------|--------|--------|--------|--|
| | 13477 | 5/14/77 | F1 = 50573 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13577 | 5/15/77 | F1 = 43814 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13677 | 5/16/77 | F1 = 406 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 13777 | 5/17/77 | F1 = 223. | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z714 | 14377 | 5/23/77 | F1 = 35 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14477 | 5/24/77 | F1 = 33 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14577 | 5/25/77 | F1 = 20 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14677 | 5/26/77 | F1 = 10 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14777 | 5/27/77 | F1 = 20 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14877 | 5/28/77 | F1 = 8 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 14977 | 5/29/77 | F1 = 15 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z715 | 15077 | 5/30/77 | f1 = 11 | f2 = 0 | f3 = 0 | f4 = 0 | |
| | 15277 | 6/ 1/77 | f1 = 21 | f2 = 0 | f3 = 0 | f4 = 0 | |
| | 15377 | 6/ 2/77 | f1 = 185 | f2 = 0 | f3 = 0 | f4 = 0 | |
| | 15477 | 6/ 3/77 | f1 = 135 | f2 = 0 | f3 = 0 | f4 = 0 | |
| | 15577 | 6/ 4/77 | F1 = 4 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 15777 | 6/ 6/77 | F1 = 70 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 15877 | 6/ 7/77 | F1 = 1710 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 15977 | 6/ 8/77 | F1 = 5916 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z716 | 16077 | 6/ 9/77 | F1 = 1828 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16177 | 6/10/77 | F1 = 20430 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16277 | 6/11/77 | F1 = 51144 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16377 | 6/12/77 | F1 = 40848 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16477 | 6/13/77 | F1 = 5096 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16677 | 6/15/77 | F1 = 29165 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16777 | 6/16/77 | F1 = 31157 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 16977 | 6/18/77 | F1 = 49470 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z717 | 17077 | 6/19/77 | F1 = 58739 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17177 | 6/20/77 | F1 = 58774 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17277 | 6/21/77 | F1 = 40046 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17477 | 6/23/77 | F1 = 26239 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17577 | 6/24/77 | F1 = 40074 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17677 | 6/25/77 | F1 = 37846 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17777 | 6/26/77 | F1 = 20316 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17877 | 6/27/77 | F1 = 17258 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 17977 | 6/28/77 | F1 = 23220 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z718 | 18077 | 6/29/77 | F1 = 20480 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18177 | 6/30/77 | F1 = 27255 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18277 | 7/ 1/77 | F1 = 28725 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18377 | 7/ 2/77 | F1 = 32896 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18477 | 7/ 3/77 | F1 = 14652 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18577 | 7/ 4/77 | F1 = 65293 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18677 | 7/ 5/77 | F1 = 32028 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18777 | 7/ 6/77 | F1 = 19653 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18877 | 7/ 7/77 | F1 = 39920 | F2 = 0 | F3 = 0 | F4 = 0 | |
| | 18977 | 7/ 8/77 | F1 = 5092 | F2 = 0 | F3 = 0 | F4 = 0 | |
| Z719 | 19077 | 7/ 9/77 | F1 = 17017 | F2 = 0 | F3 = 0 | F4 = 0 | |

| | | | | | | |
|-------|---------|------------|------------|------------|--------|--------|
| 19177 | 7/10/77 | F1 = 14314 | F2 = 0 | F3 = 0 | F4 = 0 | |
| 19477 | 7/13/77 | F1 = 0 | F2 = 7590 | F3 = 0 | F4 = 0 | |
| 19677 | 7/15/77 | F1 = 0 | F2 = 3819 | F3 = 0 | F4 = 0 | |
| 19977 | 7/18/77 | F1 = 2949 | F2 = 16767 | F3 = 0 | F4 = 0 | |
| Z720 | 20177 | 7/20/77 | F1 = 0 | F2 = 21262 | F3 = 0 | F4 = 0 |
| | 20277 | 7/21/77 | F1 = 76 | F2 = 15324 | F3 = 0 | F4 = 0 |
| | 20377 | 7/22/77 | F1 = 28 | F2 = 19069 | F3 = 0 | F4 = 0 |
| | 20477 | 7/23/77 | F1 = 92 | F2 = 52242 | F3 = 0 | F4 = 0 |
| | 20677 | 7/25/77 | F1 = 0 | F2 = 27068 | F3 = 0 | F4 = 0 |
| | 20777 | 7/26/77 | F1 = 0 | F2 = 24874 | F3 = 0 | F4 = 0 |
| | 20877 | 7/27/77 | F1 = 0 | F2 = 24133 | F3 = 0 | F4 = 0 |
| | 20977 | 7/28/77 | F1 = 0 | F2 = 23751 | F3 = 0 | F4 = 0 |
| Z721 | 21077 | 7/29/77 | F1 = 0 | F2 = 23805 | F3 = 0 | F4 = 0 |
| | 21177 | 7/30/77 | F1 = 0 | F2 = 27521 | F3 = 0 | F4 = 0 |
| | 21277 | 7/31/77 | F1 = 0 | F2 = 27570 | F3 = 0 | F4 = 0 |
| | 21377 | 8/ 1/77 | F1 = 0 | F2 = 26645 | F3 = 0 | F4 = 0 |
| | 21477 | 8/ 2/77 | F1 = 0 | F2 = 24205 | F3 = 0 | F4 = 0 |
| | 21577 | 8/ 3/77 | F1 = 0 | F2 = 23986 | F3 = 0 | F4 = 0 |
| | 21777 | 8/ 5/77 | F1 = 0 | F2 = 24650 | F3 = 0 | F4 = 0 |
| | 21877 | 8/ 6/77 | F1 = 0 | F2 = 21851 | F3 = 0 | F4 = 0 |
| Z722 | 22077 | 8/ 8/77 | F1 = 0 | F2 = 25883 | F3 = 0 | F4 = 0 |
| | 22177 | 8/ 9/77 | F1 = 0 | F2 = 22091 | F3 = 0 | F4 = 0 |
| | 22277 | 8/10/77 | F1 = 0 | F2 = 24664 | F3 = 0 | F4 = 0 |
| | 22377 | 8/11/77 | F1 = 0 | F2 = 26562 | F3 = 0 | F4 = 0 |
| | 22477 | 8/12/77 | F1 = 0 | F2 = 23742 | F3 = 0 | F4 = 0 |
| | 22577 | 8/13/77 | F1 = 0 | F2 = 21246 | F3 = 0 | F4 = 0 |
| | 22677 | 8/14/77 | F1 = 0 | F2 = 22153 | F3 = 0 | F4 = 0 |
| | 22777 | 8/15/77 | F1 = 0 | F2 = 22859 | F3 = 0 | F4 = 0 |
| | 22877 | 8/16/77 | F1 = 0 | F2 = 7401 | F3 = 0 | F4 = 0 |
| Z723 | 23077 | 8/18/77 | F1 = 0 | F2 = 32482 | F3 = 0 | F4 = 0 |
| | 23177 | 8/19/77 | F1 = 0 | F2 = 23896 | F3 = 0 | F4 = 0 |
| | 23277 | 8/20/77 | F1 = 0 | F2 = 19840 | F3 = 0 | F4 = 0 |
| | 23377 | 8/21/77 | F1 = 0 | F2 = 27499 | F3 = 0 | F4 = 0 |
| | 23477 | 8/22/77 | F1 = 0 | F2 = 27786 | F3 = 0 | F4 = 0 |
| | 23577 | 8/23/77 | F1 = 0 | F2 = 24739 | F3 = 0 | F4 = 0 |
| | 23677 | 8/24/77 | F1 = 0 | F2 = 21628 | F3 = 0 | F4 = 0 |
| | 23777 | 8/25/77 | F1 = 0 | F2 = 24350 | F3 = 0 | F4 = 0 |
| | 23877 | 8/26/77 | F1 = 0 | F2 = 23771 | F3 = 0 | F4 = 0 |
| | 23977 | 8/27/77 | F1 = 0 | F2 = 27548 | F3 = 0 | F4 = 0 |
| Z724 | 24077 | 8/28/77 | F1 = 0 | F2 = 26909 | F3 = 0 | F4 = 0 |
| | 24177 | 8/29/77 | F1 = 0 | F2 = 24430 | F3 = 0 | F4 = 0 |
| | 24777 | 9/ 4/77 | F1 = 0 | F2 = 16726 | F3 = 0 | F4 = 0 |
| | 24877 | 9/ 5/77 | F1 = 0 | F2 = 33323 | F3 = 0 | F4 = 0 |
| | 24977 | 9/ 6/77 | F1 = 0 | F2 = 20974 | F3 = 0 | F4 = 0 |
| Z725 | 25077 | 9/ 7/77 | F1 = 0 | F2 = 10890 | F3 = 0 | F4 = 0 |
| | 25177 | 9/ 8/77 | F1 = 0 | F2 = 10490 | F3 = 0 | F4 = 0 |
| | 25277 | 9/ 9/77 | F1 = 0 | F2 = 20935 | F3 = 0 | F4 = 0 |

| | | | | | | | | | |
|------|-------|----------|------|---|------------|------|---|------|---|
| | 25377 | 9/10/77 | F1 = | 0 | F2 = 23087 | F3 = | 0 | F4 = | 0 |
| | 25477 | 9/11/77 | F1 = | 0 | F2 = 25326 | F3 = | 0 | F4 = | 0 |
| | 25577 | 9/12/77 | F1 = | 0 | F2 = 19390 | F3 = | 0 | F4 = | 0 |
| | 25677 | 9/13/77 | F1 = | 0 | F2 = 6984 | F3 = | 0 | F4 = | 0 |
| | 25777 | 9/14/77 | F1 = | 0 | F2 = 26073 | F3 = | 0 | F4 = | 0 |
| | 25877 | 9/15/77 | F1 = | 0 | F2 = 10467 | F3 = | 0 | F4 = | 0 |
| | 25977 | 9/16/77 | F1 = | 0 | F2 = 28365 | F3 = | 0 | F4 = | 0 |
| Z726 | 26077 | 9/17/77 | F1 = | 0 | F2 = 24543 | F3 = | 0 | F4 = | 0 |
| | 26277 | 9/19/77 | F1 = | 0 | F2 = 20943 | F3 = | 0 | F4 = | 0 |
| | 26377 | 9/20/77 | F1 = | 0 | F2 = 29384 | F3 = | 0 | F4 = | 0 |
| | 26477 | 9/21/77 | F1 = | 0 | F2 = 12003 | F3 = | 0 | F4 = | 0 |
| | 26577 | 9/22/77 | F1 = | 0 | F2 = 24286 | F3 = | 0 | F4 = | 0 |
| | 26677 | 9/23/77 | F1 = | 0 | F2 = 23501 | F3 = | 0 | F4 = | 0 |
| | 26877 | 9/25/77 | F1 = | 0 | F2 = 24494 | F3 = | 0 | F4 = | 0 |
| | 26977 | 9/26/77 | F1 = | 0 | F2 = 17918 | F3 = | 0 | F4 = | 0 |
| Z727 | 27077 | 9/27/77 | F1 = | 0 | F2 = 24545 | F3 = | 0 | F4 = | 0 |
| | 27177 | 9/28/77 | F1 = | 0 | F2 = 24794 | F3 = | 0 | F4 = | 0 |
| | 27277 | 9/29/77 | F1 = | 0 | F2 = 3401 | F3 = | 0 | F4 = | 0 |
| | 27377 | 9/30/77 | F1 = | 0 | F2 = 25045 | F3 = | 0 | F4 = | 0 |
| | 27477 | 10/ 1/77 | F1 = | 0 | F2 = 25656 | F3 = | 0 | F4 = | 0 |
| | 27577 | 10/ 2/77 | F1 = | 0 | F2 = 27982 | F3 = | 0 | F4 = | 0 |
| | 27677 | 10/ 3/77 | F1 = | 0 | F2 = 3507 | F3 = | 0 | F4 = | 0 |
| | 27777 | 10/ 4/77 | F1 = | 0 | F2 = 21271 | F3 = | 0 | F4 = | 0 |
| | 27877 | 10/ 5/77 | F1 = | 0 | F2 = 25093 | F3 = | 0 | F4 = | 0 |
| Z728 | 28077 | 10/ 7/77 | F1 = | 0 | F2 = 25247 | F3 = | 0 | F4 = | 0 |
| | 28177 | 10/ 8/77 | F1 = | 0 | F2 = 28325 | F3 = | 0 | F4 = | 0 |
| | 28277 | 10/ 9/77 | F1 = | 0 | F2 = 23827 | F3 = | 0 | F4 = | 0 |
| | 28377 | 10/10/77 | F1 = | 0 | F2 = 21756 | F3 = | 0 | F4 = | 0 |
| | 28477 | 10/11/77 | F1 = | 0 | F2 = 16435 | F3 = | 0 | F4 = | 0 |
| | 28577 | 10/12/77 | F1 = | 0 | F2 = 7013 | F3 = | 0 | F4 = | 0 |
| | 28777 | 10/14/77 | F1 = | 0 | F2 = 25485 | F3 = | 0 | F4 = | 0 |
| | 28877 | 10/15/77 | F1 = | 0 | F2 = 2565 | F3 = | 0 | F4 = | 0 |
| | 28977 | 10/16/77 | F1 = | 0 | F2 = 25441 | F3 = | 0 | F4 = | 0 |
| Z729 | 29077 | 10/17/77 | F1 = | 0 | F2 = 21698 | F3 = | 0 | F4 = | 0 |
| | 29177 | 10/18/77 | F1 = | 0 | F2 = 25472 | F3 = | 0 | F4 = | 0 |
| | 29277 | 10/19/77 | F1 = | 0 | F2 = 25151 | F3 = | 0 | F4 = | 0 |
| | 29377 | 10/20/77 | F1 = | 0 | F2 = 10977 | F3 = | 0 | F4 = | 0 |
| | 29477 | 10/21/77 | F1 = | 0 | F2 = 30478 | F3 = | 0 | F4 = | 0 |
| | 29577 | 10/22/77 | F1 = | 0 | F2 = 47696 | F3 = | 0 | F4 = | 0 |
| | 29677 | 10/23/77 | F1 = | 0 | F2 = 52377 | F3 = | 0 | F4 = | 0 |
| | 29777 | 10/24/77 | F1 = | 0 | F2 = 29184 | F3 = | 0 | F4 = | 0 |
| | 29877 | 10/25/77 | F1 = | 0 | F2 = 21866 | F3 = | 0 | F4 = | 0 |
| | 29977 | 10/26/77 | F1 = | 0 | F2 = 31953 | F3 = | 0 | F4 = | 0 |
| Z730 | 30177 | 10/28/77 | F1 = | 0 | F2 = 34929 | F3 = | 0 | F4 = | 0 |
| | 30277 | 10/29/77 | F1 = | 0 | F2 = 30061 | F3 = | 0 | F4 = | 0 |
| | 30377 | 10/30/77 | F1 = | 0 | F2 = 31729 | F3 = | 0 | F4 = | 0 |
| | 30477 | 10/31/77 | F1 = | 0 | F2 = 40664 | F3 = | 0 | F4 = | 0 |
| | 30577 | 11/ 1/77 | F1 = | 0 | F2 = 42772 | F3 = | 0 | F4 = | 0 |

| | | | | | | | |
|-------|----------|----------|--------------|--------------|--------|--------|---|
| 30677 | 11/ 2/77 | F1 = | 0 F2 = 38267 | F3 = | 0 F4 = | 0 | |
| 30777 | 11/ 3/77 | F1 = | 0 F2 = 51777 | F3 = | 0 F4 = | 0 | |
| 30877 | 11/ 4/77 | F1 = | 0 F2 = 36781 | F3 = | 0 F4 = | 0 | |
| 30977 | 11/ 5/77 | F1 = | 0 F2 = 50616 | F3 = | 0 F4 = | 0 | |
| Z731 | 31077 | 11/ 6/77 | F1 = | 0 F2 = 34705 | F3 = | 0 F4 = | 0 |
| | 31177 | 11/ 7/77 | F1 = | 0 F2 = 15673 | F3 = | 0 F4 = | 0 |
| | 31277 | 11/ 8/77 | F1 = | 0 F2 = 46513 | F3 = | 0 F4 = | 0 |
| | 31377 | 11/ 9/77 | F1 = | 0 F2 = 16715 | F3 = | 0 F4 = | 0 |
| | 31477 | 11/10/77 | F1 = | 0 F2 = 40647 | F3 = | 0 F4 = | 0 |
| | 31577 | 11/11/77 | F1 = | 0 F2 = 35481 | F3 = | 0 F4 = | 0 |
| | 31677 | 11/12/77 | F1 = | 0 F2 = 18578 | F3 = | 0 F4 = | 0 |
| | 31777 | 11/13/77 | F1 = | 0 F2 = 54311 | F3 = | 0 F4 = | 0 |
| | 31877 | 11/14/77 | F1 = | 0 F2 = 30171 | F3 = | 0 F4 = | 0 |
| | 31977 | 11/15/77 | F1 = | 0 F2 = 31565 | F3 = | 0 F4 = | 0 |
| Z732 | 32077 | 11/16/77 | F1 = | 0 F2 = 44229 | F3 = | 0 F4 = | 0 |
| | 32177 | 11/17/77 | F1 = | 0 F2 = 19734 | F3 = | 0 F4 = | 0 |
| | 32277 | 11/18/77 | F1 = | 0 F2 = 14934 | F3 = | 0 F4 = | 0 |
| | 32377 | 11/19/77 | F1 = | 0 F2 = 45984 | F3 = | 0 F4 = | 0 |
| | 32477 | 11/20/77 | F1 = | 0 F2 = 43845 | F3 = | 0 F4 = | 0 |
| | 32577 | 11/21/77 | F1 = | 0 F2 = 40174 | F3 = | 0 F4 = | 0 |
| | 32677 | 11/22/77 | F1 = | 0 F2 = 40445 | F3 = | 0 F4 = | 0 |
| | 32777 | 11/23/77 | F1 = | 0 F2 = 30354 | F3 = | 0 F4 = | 0 |
| | 32877 | 11/24/77 | F1 = | 0 F2 = 36643 | F3 = | 0 F4 = | 0 |
| | 32977 | 11/25/77 | F1 = | 0 F2 = 35094 | F3 = | 0 F4 = | 0 |
| Z733 | 33077 | 11/26/77 | F1 = | 0 F2 = 28266 | F3 = | 0 F4 = | 0 |
| | 33177 | 11/27/77 | F1 = | 0 F2 = 42612 | F3 = | 0 F4 = | 0 |
| | 33277 | 11/28/77 | F1 = | 0 F2 = 36427 | F3 = | 0 F4 = | 0 |
| | 33377 | 11/29/77 | F1 = | 0 F2 = 39719 | F3 = | 0 F4 = | 0 |
| | 33477 | 11/30/77 | F1 = | 0 F2 = 6856 | F3 = | 0 F4 = | 0 |
| | 33577 | 12/ 1/77 | F1 = | 0 F2 = 3523 | F3 = | 0 F4 = | 0 |
| | 33677 | 12/ 2/77 | F1 = | 0 F2 = 19847 | F3 = | 0 F4 = | 0 |
| | 33777 | 12/ 3/77 | F1 = | 0 F2 = 48407 | F3 = | 0 F4 = | 0 |
| | 33877 | 12/ 4/77 | F1 = | 0 F2 = 31794 | F3 = | 0 F4 = | 0 |
| | 33977 | 12/ 5/77 | F1 = | 0 F2 = 46768 | F3 = | 0 F4 = | 0 |
| Z734 | 34077 | 12/ 6/77 | F1 = | 0 F2 = 21182 | F3 = | 0 F4 = | 0 |
| | 34177 | 12/ 7/77 | F1 = | 0 F2 = 19253 | F3 = | 0 F4 = | 0 |
| | 34277 | 12/ 8/77 | F1 = | 0 F2 = 33567 | F3 = | 0 F4 = | 0 |
| | 34377 | 12/ 9/77 | F1 = | 0 F2 = 10950 | F3 = | 0 F4 = | 0 |
| | 34477 | 12/10/77 | F1 = | 0 F2 = 46402 | F3 = | 0 F4 = | 0 |
| | 34577 | 12/11/77 | F1 = | 0 F2 = 35650 | F3 = | 0 F4 = | 0 |
| | 34677 | 12/12/77 | F1 = | 0 F2 = 43105 | F3 = | 0 F4 = | 0 |
| | 34777 | 12/13/77 | F1 = | 0 F2 = 35271 | F3 = | 0 F4 = | 0 |
| | 34877 | 12/14/77 | F1 = | 0 F2 = 49378 | F3 = | 0 F4 = | 0 |
| | 34977 | 12/15/77 | F1 = | 0 F2 = 32747 | F3 = | 0 F4 = | 0 |
| Z735 | 35077 | 12/16/77 | F1 = | 0 F2 = 23400 | F3 = | 0 F4 = | 0 |
| | 35177 | 12/17/77 | F1 = | 0 F2 = 47540 | F3 = | 0 F4 = | 0 |
| | 35277 | 12/18/77 | F1 = | 0 F2 = 47655 | F3 = | 0 F4 = | 0 |
| | 35377 | 12/19/77 | F1 = | 0 F2 = 30718 | F3 = | 0 F4 = | 0 |

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|-------|----------|----------|------|------------|------------|------|------|------|---|
| 35477 | 12/20/77 | F1 = | 0 | F2 = 47983 | F3 = | 0 | F4 = | 0 | |
| 35577 | 12/21/77 | F1 = | 0 | F2 = 43702 | F3 = | 0 | F4 = | 0 | |
| 35677 | 12/22/77 | F1 = | 0 | F2 = 52680 | F3 = | 0 | F4 = | 0 | |
| 35777 | 12/23/77 | F1 = | 0 | F2 = 46179 | F3 = | 0 | F4 = | 0 | |
| 35877 | 12/24/77 | F1 = | 0 | F2 = 43412 | F3 = | 0 | F4 = | 0 | |
| 35977 | 12/25/77 | F1 = | 0 | F2 = 45114 | F3 = | 0 | F4 = | 0 | |
| Z736 | 36077 | 12/26/77 | F1 = | 0 | F2 = 49015 | F3 = | 0 | F4 = | 0 |
| | 36177 | 12/27/77 | F1 = | 0 | F2 = 29615 | F3 = | 0 | F4 = | 0 |
| | 36277 | 12/28/77 | F1 = | 0 | F2 = 52794 | F3 = | 0 | F4 = | 0 |
| | 36377 | 12/29/77 | F1 = | 0 | F2 = 35415 | F3 = | 0 | F4 = | 0 |
| | 36477 | 12/30/77 | F1 = | 0 | F2 = 32900 | F3 = | 0 | F4 = | 0 |
| | 36577 | 12/31/77 | F1 = | 0 | F2 = 42731 | F3 = | 0 | F4 = | 0 |
| Z800 | 00178 | 1/ 1/78 | F1 = | 0 | F2 = 30544 | F3 = | 0 | F4 = | 0 |
| | 00278 | 1/ 2/78 | F1 = | 0 | F2 = 46497 | F3 = | 0 | F4 = | 0 |
| | 00378 | 1/ 3/78 | F1 = | 0 | F2 = 44042 | F3 = | 0 | F4 = | 0 |
| | 00478 | 1/ 4/78 | F1 = | 0 | F2 = 41598 | F3 = | 0 | F4 = | 0 |
| | 00578 | 1/ 5/78 | F1 = | 0 | F2 = 40632 | F3 = | 0 | F4 = | 0 |
| | 00678 | 1/ 6/78 | F1 = | 0 | F2 = 51209 | F3 = | 0 | F4 = | 0 |
| | 00778 | 1/ 7/78 | F1 = | 0 | F2 = 49833 | F3 = | 0 | F4 = | 0 |
| | 00878 | 1/ 8/78 | F1 = | 0 | F2 = 40874 | F3 = | 0 | F4 = | 0 |
| | 00978 | 1/ 9/78 | F1 = | 0 | F2 = 45879 | F3 = | 0 | F4 = | 0 |
| Z801 | 01078 | 1/10/78 | F1 = | 0 | F2 = 46932 | F3 = | 0 | F4 = | 0 |
| | 01178 | 1/11/78 | F1 = | 0 | F2 = 51863 | F3 = | 0 | F4 = | 0 |
| | 01278 | 1/12/78 | F1 = | 0 | F2 = 34155 | F3 = | 0 | F4 = | 0 |
| | 01378 | 1/13/78 | F1 = | 0 | F2 = 14698 | F3 = | 0 | F4 = | 0 |
| | 01478 | 1/14/78 | F1 = | 0 | F2 = 7601 | F3 = | 0 | F4 = | 0 |
| | 01578 | 1/15/78 | F1 = | 0 | F2 = 59286 | F3 = | 0 | F4 = | 0 |
| | 01678 | 1/16/78 | F1 = | 0 | F2 = 38601 | F3 = | 0 | F4 = | 0 |
| | 01778 | 1/17/78 | F1 = | 0 | F2 = 53449 | F3 = | 0 | F4 = | 0 |
| | 01878 | 1/18/78 | F1 = | 0 | F2 = 40459 | F3 = | 0 | F4 = | 0 |
| | 01978 | 1/19/78 | F1 = | 0 | F2 = 48001 | F3 = | 0 | F4 = | 0 |
| Z802 | 02078 | 1/20/78 | F1 = | 0 | F2 = 50099 | F3 = | 0 | F4 = | 0 |
| | 02178 | 1/21/78 | F1 = | 0 | F2 = 47873 | F3 = | 0 | F4 = | 0 |
| | 02278 | 1/22/78 | F1 = | 0 | F2 = 44967 | F3 = | 0 | F4 = | 0 |
| | 02378 | 1/23/78 | F1 = | 0 | F2 = 34967 | F3 = | 0 | F4 = | 0 |
| | 02478 | 1/24/78 | F1 = | 0 | F2 = 4514 | F3 = | 0 | F4 = | 0 |
| | 02578 | 1/25/78 | F1 = | 0 | F2 = 26043 | F3 = | 0 | F4 = | 0 |
| | 02678 | 1/26/78 | F1 = | 0 | F2 = 29253 | F3 = | 0 | F4 = | 0 |
| | 02778 | 1/27/78 | F1 = | 0 | F2 = 29249 | F3 = | 0 | F4 = | 0 |
| | 02878 | 1/28/78 | F1 = | 0 | F2 = 22143 | F3 = | 0 | F4 = | 0 |
| | 02978 | 1/29/78 | F1 = | 0 | F2 = 48716 | F3 = | 0 | F4 = | 0 |
| Z803 | 03078 | 1/30/78 | F1 = | 0 | F2 = 42716 | F3 = | 0 | F4 = | 0 |
| | 03178 | 1/31/78 | F1 = | 0 | F2 = 49784 | F3 = | 0 | F4 = | 0 |
| | 03278 | 2/ 1/78 | F1 = | 0 | F2 = 37087 | F3 = | 0 | F4 = | 0 |
| | 03378 | 2/ 2/78 | F1 = | 0 | F2 = 42781 | F3 = | 0 | F4 = | 0 |
| | 03478 | 2/ 3/78 | F1 = | 0 | F2 = 41032 | F3 = | 0 | F4 = | 0 |
| | 03578 | 2/ 4/78 | F1 = | 0 | F2 = 46786 | F3 = | 0 | F4 = | 0 |
| | 03678 | 2/ 5/78 | F1 = | 0 | F2 = 46962 | F3 = | 0 | F4 = | 0 |

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|-------|---------|---------|--------------|--------------|--------|--------|---|
| 03778 | 2/ 6/78 | F1 = | 0 F2 = 49354 | F3 = | 0 F4 = | 0 | |
| 03878 | 2/ 7/78 | F1 = | 0 F2 = 49929 | F3 = | 0 F4 = | 0 | |
| 03978 | 2/ 8/78 | F1 = | 0 F2 = 35155 | F3 = | 0 F4 = | 0 | |
| Z804 | 04078 | 2/ 9/78 | F1 = | 0 F2 = 48925 | F3 = | 0 F4 = | 0 |
| | 04178 | 2/10/78 | F1 = | 0 F2 = 46268 | F3 = | 0 F4 = | 0 |
| | 04278 | 2/11/78 | F1 = | 0 F2 = 50180 | F3 = | 0 F4 = | 0 |
| | 04378 | 2/12/78 | F1 = | 0 F2 = 46794 | F3 = | 0 F4 = | 0 |
| | 04478 | 2/13/78 | F1 = | 0 F2 = 36425 | F3 = | 0 F4 = | 0 |
| | 04578 | 2/14/78 | F1 = | 0 F2 = 30460 | F3 = | 0 F4 = | 0 |
| | 04678 | 2/15/78 | F1 = | 0 F2 = 46295 | F3 = | 0 F4 = | 0 |
| | 04778 | 2/16/78 | F1 = | 0 F2 = 57790 | F3 = | 0 F4 = | 0 |
| | 04878 | 2/17/78 | F1 = | 0 F2 = 43261 | F3 = | 0 F4 = | 0 |
| | 04978 | 2/18/78 | F1 = | 0 F2 = 33331 | F3 = | 0 F4 = | 0 |
| Z805 | 05078 | 2/19/78 | F1 = | 0 F2 = 11837 | F3 = | 0 F4 = | 0 |
| | 05178 | 2/20/78 | F1 = | 0 F2 = 49253 | F3 = | 0 F4 = | 0 |
| | 05278 | 2/21/78 | F1 = | 0 F2 = 50288 | F3 = | 0 F4 = | 0 |
| | 05378 | 2/22/78 | F1 = | 0 F2 = 32476 | F3 = | 0 F4 = | 0 |
| | 05478 | 2/23/78 | F1 = | 0 F2 = 53349 | F3 = | 0 F4 = | 0 |
| | 05578 | 2/24/78 | F1 = | 0 F2 = 49737 | F3 = | 0 F4 = | 0 |
| | 05678 | 2/25/78 | F1 = | 0 F2 = 47206 | F3 = | 0 F4 = | 0 |
| | 05778 | 2/26/78 | F1 = | 0 F2 = 47187 | F3 = | 0 F4 = | 0 |
| | 05878 | 2/27/78 | F1 = | 0 F2 = 48308 | F3 = | 0 F4 = | 0 |
| | 05978 | 2/28/78 | F1 = | 0 F2 = 42618 | F3 = | 0 F4 = | 0 |
| Z806 | 06078 | 3/ 1/78 | F1 = | 0 F2 = 55465 | F3 = | 0 F4 = | 0 |
| | 06178 | 3/ 2/78 | F1 = | 0 F2 = 50922 | F3 = | 0 F4 = | 0 |
| | 06278 | 3/ 3/78 | F1 = | 0 F2 = 49874 | F3 = | 0 F4 = | 0 |
| | 06378 | 3/ 4/78 | F1 = | 0 F2 = 43320 | F3 = | 0 F4 = | 0 |
| | 06478 | 3/ 5/78 | F1 = | 0 F2 = 29932 | F3 = | 0 F4 = | 0 |
| | 06578 | 3/ 6/78 | F1 = | 0 F2 = 15831 | F3 = | 0 F4 = | 0 |
| | 06678 | 3/ 7/78 | F1 = | 0 F2 = 46237 | F3 = | 0 F4 = | 0 |
| | 06778 | 3/ 8/78 | F1 = | 0 F2 = 51309 | F3 = | 0 F4 = | 0 |
| | 06878 | 3/ 9/78 | F1 = | 0 F2 = 47464 | F3 = | 0 F4 = | 0 |
| | 06978 | 3/10/78 | F1 = | 0 F2 = 39679 | F3 = | 0 F4 = | 0 |
| Z807 | 07078 | 3/11/78 | F1 = | 0 F2 = 44404 | F3 = | 0 F4 = | 0 |
| | 07178 | 3/12/78 | F1 = | 0 F2 = 49963 | F3 = | 0 F4 = | 0 |
| | 07278 | 3/13/78 | F1 = | 0 F2 = 36018 | F3 = | 0 F4 = | 0 |
| | 07378 | 3/14/78 | F1 = | 0 F2 = 45080 | F3 = | 0 F4 = | 0 |
| | 07478 | 3/15/78 | F1 = | 0 F2 = 50306 | F3 = | 0 F4 = | 0 |
| | 07578 | 3/16/78 | F1 = | 0 F2 = 48116 | F3 = | 0 F4 = | 0 |
| | 07678 | 3/17/78 | F1 = | 0 F2 = 49797 | F3 = | 0 F4 = | 0 |
| | 07778 | 3/18/78 | F1 = | 0 F2 = 50537 | F3 = | 0 F4 = | 0 |
| | 07878 | 3/19/78 | F1 = | 0 F2 = 44741 | F3 = | 0 F4 = | 0 |
| | 07978 | 3/20/78 | F1 = | 0 F2 = 49576 | F3 = | 0 F4 = | 0 |
| Z808 | 08078 | 3/21/78 | F1 = | 0 F2 = 43312 | F3 = | 0 F4 = | 0 |
| | 08178 | 3/22/78 | F1 = | 0 F2 = 45201 | F3 = | 0 F4 = | 0 |
| | 08278 | 3/23/78 | F1 = | 0 F2 = 47093 | F3 = | 0 F4 = | 0 |
| | 08378 | 3/24/78 | F1 = | 0 F2 = 49177 | F3 = | 0 F4 = | 0 |
| | 08478 | 3/25/78 | F1 = | 0 F2 = 48813 | F3 = | 0 F4 = | 0 |

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|-------|---------|---------|------|------------|------------|------|------|------|---|
| 08578 | 3/26/78 | F1 = | 0 | F2 = 48851 | F3 = | 0 | F4 = | 0 | |
| 08678 | 3/27/78 | F1 = | 0 | F2 = 52029 | F3 = | 0 | F4 = | 0 | |
| 08778 | 3/28/78 | F1 = | 0 | F2 = 50997 | F3 = | 0 | F4 = | 0 | |
| 08878 | 3/29/78 | F1 = | 0 | F2 = 48792 | F3 = | 0 | F4 = | 0 | |
| 08978 | 3/30/78 | F1 = | 0 | F2 = 46703 | F3 = | 0 | F4 = | 0 | |
| Z809 | 09078 | 3/31/78 | F1 = | 0 | F2 = 47104 | F3 = | 0 | F4 = | 0 |
| | 09178 | 4/ 1/78 | F1 = | 0 | F2 = 48834 | F3 = | 0 | F4 = | 0 |
| | 09278 | 4/ 2/78 | F1 = | 0 | F2 = 35358 | F3 = | 0 | F4 = | 0 |
| | 09378 | 4/ 3/78 | F1 = | 0 | F2 = 50729 | F3 = | 0 | F4 = | 0 |
| | 09478 | 4/ 4/78 | F1 = | 0 | F2 = 50002 | F3 = | 0 | F4 = | 0 |
| | 09578 | 4/ 5/78 | F1 = | 0 | F2 = 36819 | F3 = | 0 | F4 = | 0 |
| | 09678 | 4/ 6/78 | F1 = | 0 | F2 = 49780 | F3 = | 0 | F4 = | 0 |
| | 09778 | 4/ 7/78 | F1 = | 0 | F2 = 43595 | F3 = | 0 | F4 = | 0 |
| | 09878 | 4/ 8/78 | F1 = | 0 | F2 = 45733 | F3 = | 0 | F4 = | 0 |
| | 09978 | 4/ 9/78 | F1 = | 0 | F2 = 51150 | F3 = | 0 | F4 = | 0 |
| Z810 | 10078 | 4/10/78 | F1 = | 0 | F2 = 41290 | F3 = | 0 | F4 = | 0 |
| | 10178 | 4/11/78 | F1 = | 0 | F2 = 55270 | F3 = | 0 | F4 = | 0 |
| | 10278 | 4/12/78 | F1 = | 0 | F2 = 45217 | F3 = | 0 | F4 = | 0 |
| | 10378 | 4/13/78 | F1 = | 0 | F2 = 49240 | F3 = | 0 | F4 = | 0 |
| | 10478 | 4/14/78 | F1 = | 0 | F2 = 38537 | F3 = | 0 | F4 = | 0 |
| | 10578 | 4/15/78 | F1 = | 0 | F2 = 46084 | F3 = | 0 | F4 = | 0 |
| | 10678 | 4/16/78 | F1 = | 0 | F2 = 46387 | F3 = | 0 | F4 = | 0 |
| | 10778 | 4/17/78 | F1 = | 0 | F2 = 48834 | F3 = | 0 | F4 = | 0 |
| | 10878 | 4/18/78 | F1 = | 0 | F2 = 48175 | F3 = | 0 | F4 = | 0 |
| | 10978 | 4/19/78 | F1 = | 0 | F2 = 49934 | F3 = | 0 | F4 = | 0 |
| Z811 | 11078 | 4/20/78 | F1 = | 0 | F2 = 51203 | F3 = | 0 | F4 = | 0 |
| | 11178 | 4/21/78 | F1 = | 0 | F2 = 53361 | F3 = | 0 | F4 = | 0 |
| | 11278 | 4/22/78 | F1 = | 0 | F2 = 51711 | F3 = | 0 | F4 = | 0 |
| | 11378 | 4/23/78 | F1 = | 0 | F2 = 47430 | F3 = | 0 | F4 = | 0 |
| | 11478 | 4/24/78 | F1 = | 0 | F2 = 39880 | F3 = | 0 | F4 = | 0 |
| | 11578 | 4/25/78 | F1 = | 0 | F2 = 33652 | F3 = | 0 | F4 = | 0 |
| | 11678 | 4/26/78 | F1 = | 0 | F2 = 36052 | F3 = | 0 | F4 = | 0 |
| | 11778 | 4/27/78 | F1 = | 0 | F2 = 15332 | F3 = | 0 | F4 = | 0 |
| | 11878 | 4/28/78 | F1 = | 0 | F2 = 50426 | F3 = | 0 | F4 = | 0 |
| | 11978 | 4/29/78 | F1 = | 0 | F2 = 44458 | F3 = | 0 | F4 = | 0 |
| Z812 | 12078 | 4/30/78 | F1 = | 0 | F2 = 48010 | F3 = | 0 | F4 = | 0 |
| | 12178 | 5/ 1/78 | F1 = | 0 | F2 = 44642 | F3 = | 0 | F4 = | 0 |
| | 12278 | 5/ 2/78 | F1 = | 0 | F2 = 36321 | F3 = | 0 | F4 = | 0 |
| | 12478 | 5/ 4/78 | F1 = | 0 | F2 = 19151 | F3 = | 0 | F4 = | 0 |
| | 12578 | 5/ 5/78 | F1 = | 0 | F2 = 29359 | F3 = | 0 | F4 = | 0 |
| | 12778 | 5/ 7/78 | F1 = | 0 | F2 = 28867 | F3 = | 0 | F4 = | 0 |
| | 12878 | 5/ 8/78 | F1 = | 0 | F2 = 36690 | F3 = | 0 | F4 = | 0 |
| | 12978 | 5/ 9/78 | F1 = | 0 | F2 = 15176 | F3 = | 0 | F4 = | 0 |
| Z813 | 13078 | 5/10/78 | F1 = | 0 | F2 = 55327 | F3 = | 0 | F4 = | 0 |
| | 13178 | 5/11/78 | F1 = | 0 | F2 = 55341 | F3 = | 0 | F4 = | 0 |
| | 13278 | 5/12/78 | F1 = | 0 | F2 = 43638 | F3 = | 0 | F4 = | 0 |
| | 13378 | 5/13/78 | F1 = | 0 | F2 = 43721 | F3 = | 0 | F4 = | 0 |
| | 13478 | 5/14/78 | F1 = | 0 | F2 = 47818 | F3 = | 0 | F4 = | 0 |

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|-------|---------|--------|------------|--------|--------|--|
| 13578 | 5/15/78 | F1 = 0 | F2 = 20901 | F3 = 0 | F4 = 0 | |
| 13678 | 5/16/78 | F1 = 0 | F2 = 17600 | F3 = 0 | F4 = 0 | |
| 13778 | 5/17/78 | F1 = 0 | F2 = 41744 | F3 = 0 | F4 = 0 | |
| 13878 | 5/18/78 | F1 = 0 | F2 = 39657 | F3 = 0 | F4 = 0 | |
| 13978 | 5/19/78 | F1 = 0 | F2 = 39365 | F3 = 0 | F4 = 0 | |
| Z814 | 14078 | F1 = 0 | F2 = 39150 | F3 = 0 | F4 = 0 | |
| | 14178 | F1 = 0 | F2 = 39674 | F3 = 0 | F4 = 0 | |
| | 14278 | F1 = 0 | F2 = 35408 | F3 = 0 | F4 = 0 | |
| | 14478 | F1 = 0 | F2 = 33326 | F3 = 0 | F4 = 0 | |
| | 14578 | F1 = 0 | F2 = 25623 | F3 = 0 | F4 = 0 | |
| | 14678 | F1 = 0 | F2 = 27125 | F3 = 0 | F4 = 0 | |
| | 14778 | F1 = 0 | F2 = 29790 | F3 = 0 | F4 = 0 | |
| | 14878 | F1 = 0 | F2 = 7432 | F3 = 0 | F4 = 0 | |
| | 14978 | F1 = 0 | F2 = 36093 | F3 = 0 | F4 = 0 | |
| Z815 | 15078 | F1 = 0 | F2 = 31895 | F3 = 0 | F4 = 0 | |
| | 15278 | F1 = 0 | F2 = 36364 | F3 = 0 | F4 = 0 | |
| | 15378 | F1 = 0 | F2 = 25246 | F3 = 0 | F4 = 0 | |
| | 15478 | F1 = 0 | F2 = 23684 | F3 = 0 | F4 = 0 | |
| | 15578 | F1 = 0 | F2 = 20330 | F3 = 0 | F4 = 0 | |
| | 15678 | F1 = 0 | F2 = 38942 | F3 = 0 | F4 = 0 | |
| | 15778 | F1 = 0 | F2 = 21783 | F3 = 0 | F4 = 0 | |
| | 15878 | F1 = 0 | F2 = 4464 | F3 = 0 | F4 = 0 | |
| | 15978 | F1 = 0 | F2 = 46754 | F3 = 0 | F4 = 0 | |
| Z816 | 16078 | F1 = 0 | F2 = 25929 | F3 = 0 | F4 = 0 | |
| | 16178 | F1 = 0 | F2 = 34819 | F3 = 0 | F4 = 0 | |
| | 16278 | F1 = 0 | F2 = 31333 | F3 = 0 | F4 = 0 | |
| | 16378 | F1 = 0 | F2 = 3882 | F3 = 0 | F4 = 0 | |
| | 16478 | F1 = 0 | F2 = 42759 | F3 = 0 | F4 = 0 | |
| | 16578 | F1 = 0 | F2 = 31516 | F3 = 0 | F4 = 0 | |
| | 16678 | F1 = 0 | F2 = 31617 | F3 = 0 | F4 = 0 | |
| | 16778 | F1 = 0 | F2 = 33736 | F3 = 0 | F4 = 0 | |
| | 16878 | F1 = 0 | F2 = 44357 | F3 = 0 | F4 = 0 | |
| | 16978 | F1 = 0 | F2 = 44747 | F3 = 0 | F4 = 0 | |
| Z817 | 17078 | F1 = 0 | F2 = 16948 | F3 = 0 | F4 = 0 | |
| | 17178 | F1 = 0 | F2 = 35093 | F3 = 0 | F4 = 0 | |
| | 17278 | F1 = 0 | F2 = 35157 | F3 = 0 | F4 = 0 | |
| | 17378 | F1 = 0 | F2 = 52913 | F3 = 0 | F4 = 0 | |
| | 17478 | F1 = 0 | F2 = 30155 | F3 = 0 | F4 = 0 | |
| | 17578 | F1 = 0 | F2 = 35148 | F3 = 0 | F4 = 0 | |
| | 17678 | F1 = 0 | F2 = 46329 | F3 = 0 | F4 = 0 | |
| | 17778 | F1 = 0 | F2 = 36875 | F3 = 0 | F4 = 0 | |
| | 17878 | F1 = 0 | F2 = 41822 | F3 = 0 | F4 = 0 | |
| | 17978 | F1 = 0 | F2 = 44083 | F3 = 0 | F4 = 0 | |
| Z818 | 18078 | F1 = 0 | F2 = 27283 | F3 = 0 | F4 = 0 | |
| | 18178 | F1 = 0 | F2 = 35871 | F3 = 0 | F4 = 0 | |
| | 18278 | F1 = 0 | F2 = 32682 | F3 = 0 | F4 = 0 | |
| | 18378 | F1 = 0 | F2 = 37331 | F3 = 0 | F4 = 0 | |
| | 18478 | F1 = 0 | F2 = 33060 | F3 = 0 | F4 = 0 | |

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|-------|---------|---------|-------------------|------------|--------|---|
| 18578 | 7/ 4/78 | F1 = | 0 F2 = 33828 | F3 = | 0 F4 = | 0 |
| 18678 | 7/ 5/78 | F1 = | 0 F2 = 36753 | F3 = | 0 F4 = | 0 |
| 18778 | 7/ 6/78 | F1 = | 0 F2 = 24884 | F3 = | 0 F4 = | 0 |
| 18978 | 7/ 8/78 | F1 = | 0 F2 = 29791 | F3 = | 0 F4 = | 0 |
| Z819 | 19078 | 7/ 9/78 | F1 = 0 F2 = 35041 | F3 = | 0 F4 = | 0 |
| | 19178 | 7/10/78 | F1 = 0 F2 = 34917 | F3 = | 0 F4 = | 0 |
| | 19278 | 7/11/78 | F1 = 0 F2 = 35920 | F3 = | 0 F4 = | 0 |
| | 19378 | 7/12/78 | F1 = 0 F2 = 45991 | F3 = | 0 F4 = | 0 |
| | 19478 | 7/13/78 | F1 = 0 F2 = 26445 | F3 = | 0 F4 = | 0 |
| | 19578 | 7/14/78 | F1 = 0 F2 = 45939 | F3 = | 0 F4 = | 0 |
| | 19678 | 7/15/78 | F1 = 0 F2 = 24766 | F3 = | 0 F4 = | 0 |
| | 19778 | 7/16/78 | F1 = 0 F2 = 31151 | F3 = | 0 F4 = | 0 |
| | 19878 | 7/17/78 | F1 = 0 F2 = 33183 | F3 = | 0 F4 = | 0 |
| | 19978 | 7/18/78 | F1 = 0 F2 = 33079 | F3 = | 0 F4 = | 0 |
| Z820 | 20078 | 7/19/78 | F1 = 0 F2 = 33877 | F3 = | 0 F4 = | 0 |
| | 20178 | 7/20/78 | F1 = 0 F2 = 41244 | F3 = | 0 F4 = | 0 |
| | 20278 | 7/21/78 | F1 = 0 F2 = 20543 | F3 = | 0 F4 = | 0 |
| | 20378 | 7/22/78 | F1 = 0 F2 = 13796 | F3 = | 0 F4 = | 0 |
| | 20478 | 7/23/78 | F1 = 0 F2 = 32045 | F3 = 783 | F4 = | 0 |
| | 20578 | 7/24/78 | F1 = 0 F2 = 36248 | F3 = 21645 | F4 = | 0 |
| | 20678 | 7/25/78 | F1 = 0 F2 = 36739 | F3 = 21595 | F4 = | 0 |
| | 20778 | 7/26/78 | F1 = 0 F2 = 28546 | F3 = 19543 | F4 = | 0 |
| | 20878 | 7/27/78 | F1 = 0 F2 = 17441 | F3 = 11198 | F4 = | 0 |
| | 20978 | 7/28/78 | F1 = 0 F2 = 47147 | F3 = 28638 | F4 = | 0 |
| Z821 | 21078 | 7/29/78 | F1 = 0 F2 = 49186 | F3 = 30853 | F4 = | 0 |
| | 21178 | 7/30/78 | F1 = 0 F2 = 45959 | F3 = 34643 | F4 = | 0 |
| | 21278 | 7/31/78 | F1 = 0 F2 = 45252 | F3 = 31468 | F4 = | 0 |
| | 21378 | 8/ 1/78 | F1 = 0 F2 = 43428 | F3 = 19609 | F4 = | 0 |
| | 21478 | 8/ 2/78 | F1 = 0 F2 = 34089 | F3 = 26840 | F4 = | 0 |
| | 21578 | 8/ 3/78 | F1 = 0 F2 = 45545 | F3 = 26594 | F4 = | 0 |
| | 21678 | 8/ 4/78 | F1 = 0 F2 = 45972 | F3 = 27198 | F4 = | 0 |
| | 21778 | 8/ 5/78 | F1 = 0 F2 = 47261 | F3 = 26898 | F4 = | 0 |
| | 21878 | 8/ 6/78 | F1 = 0 F2 = 27377 | F3 = 17854 | F4 = | 0 |
| | 21978 | 8/ 7/78 | F1 = 0 F2 = 16403 | F3 = 17460 | F4 = | 0 |
| Z822 | 22078 | 8/ 8/78 | F1 = 0 F2 = 46008 | F3 = 26670 | F4 = | 0 |
| | 22178 | 8/ 9/78 | F1 = 0 F2 = 46417 | F3 = 27628 | F4 = | 0 |
| | 22278 | 8/10/78 | F1 = 0 F2 = 44915 | F3 = 26819 | F4 = | 0 |
| | 22378 | 8/11/78 | F1 = 0 F2 = 48215 | F3 = 27534 | F4 = | 0 |
| | 22478 | 8/12/78 | F1 = 0 F2 = 47168 | F3 = 25148 | F4 = | 0 |
| | 22578 | 8/13/78 | F1 = 0 F2 = 43042 | F3 = 25569 | F4 = | 0 |
| | 22678 | 8/14/78 | F1 = 0 F2 = 36319 | F3 = 26926 | F4 = | 0 |
| | 22778 | 8/15/78 | F1 = 0 F2 = 32408 | F3 = 21284 | F4 = | 0 |
| | 22878 | 8/16/78 | F1 = 0 F2 = 15262 | F3 = 8479 | F4 = | 0 |
| | 22978 | 8/17/78 | F1 = 0 F2 = 46598 | F3 = 25746 | F4 = | 0 |
| Z823 | 23078 | 8/18/78 | F1 = 0 F2 = 48293 | F3 = 25135 | F4 = | 0 |
| | 23178 | 8/19/78 | F1 = 0 F2 = 48613 | F3 = 25509 | F4 = | 0 |
| | 23278 | 8/20/78 | F1 = 0 F2 = 45879 | F3 = 25403 | F4 = | 0 |
| | 23378 | 8/21/78 | F1 = 0 F2 = 48052 | F3 = 25258 | F4 = | 0 |

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|-------|---------|----------|------------|------------|------------|--------|
| 23478 | 8/22/78 | F1 = 0 | F2 = 46637 | F3 = 25350 | F4 = 0 | |
| 23578 | 8/23/78 | F1 = 0 | F2 = 47183 | F3 = 25346 | F4 = 0 | |
| 23678 | 8/24/78 | F1 = 0 | F2 = 52666 | F3 = 25081 | F4 = 0 | |
| 23778 | 8/25/78 | F1 = 0 | F2 = 46374 | F3 = 32057 | F4 = 0 | |
| 23878 | 8/26/78 | F1 = 0 | F2 = 45412 | F3 = 24848 | F4 = 0 | |
| 23978 | 8/27/78 | F1 = 0 | F2 = 47658 | F3 = 24901 | F4 = 0 | |
| Z824 | 24078 | F1 = 0 | F2 = 51266 | F3 = 18279 | F4 = 0 | |
| | 24178 | F1 = 0 | F2 = 44674 | F3 = 27206 | F4 = 0 | |
| | 24278 | F1 = 0 | F2 = 45142 | F3 = 25110 | F4 = 0 | |
| | 24378 | F1 = 0 | F2 = 47506 | F3 = 24950 | F4 = 0 | |
| | 24478 | 9/ 1/78 | F1 = 0 | F2 = 40774 | F3 = 16578 | F4 = 0 |
| | 24578 | 9/ 2/78 | F1 = 0 | F2 = 41683 | F3 = 23027 | F4 = 0 |
| | 24678 | 9/ 3/78 | F1 = 0 | F2 = 27066 | F3 = 28481 | F4 = 0 |
| | 24778 | 9/ 4/78 | F1 = 0 | F2 = 31776 | F3 = 24931 | F4 = 0 |
| | 24878 | 9/ 5/78 | F1 = 0 | F2 = 42192 | F3 = 25252 | F4 = 0 |
| | 24978 | 9/ 6/78 | F1 = 0 | F2 = 40991 | F3 = 27914 | F4 = 0 |
| Z825 | 25078 | 9/ 7/78 | F1 = 0 | F2 = 35250 | F3 = 24774 | F4 = 0 |
| | 25178 | 9/ 8/78 | F1 = 0 | F2 = 45155 | F3 = 24741 | F4 = 0 |
| | 25278 | 9/ 9/78 | F1 = 0 | F2 = 45686 | F3 = 26758 | F4 = 0 |
| | 25378 | 9/10/78 | F1 = 0 | F2 = 51475 | F3 = 27141 | F4 = 0 |
| | 25478 | 9/11/78 | F1 = 0 | F2 = 40772 | F3 = 27342 | F4 = 0 |
| | 25578 | 9/12/78 | F1 = 0 | F2 = 46914 | F3 = 26950 | F4 = 0 |
| | 25678 | 9/13/78 | F1 = 0 | F2 = 46930 | F3 = 27626 | F4 = 0 |
| | 25778 | 9/14/78 | F1 = 0 | F2 = 47651 | F3 = 27013 | F4 = 0 |
| | 25878 | 9/15/78 | F1 = 0 | F2 = 41958 | F3 = 26317 | F4 = 0 |
| | 25978 | 9/16/78 | F1 = 0 | F2 = 45361 | F3 = 26079 | F4 = 0 |
| Z826 | 26078 | 9/17/78 | F1 = 0 | F2 = 64626 | F3 = 33360 | F4 = 0 |
| | 26178 | 9/18/78 | F1 = 0 | F2 = 46619 | F3 = 24076 | F4 = 0 |
| | 26278 | 9/19/78 | F1 = 0 | F2 = 33278 | F3 = 26064 | F4 = 0 |
| | 26378 | 9/20/78 | F1 = 0 | F2 = 47801 | F3 = 25770 | F4 = 0 |
| | 26478 | 9/21/78 | F1 = 0 | F2 = 46010 | F3 = 19469 | F4 = 0 |
| | 26578 | 9/22/78 | F1 = 0 | F2 = 47689 | F3 = 26032 | F4 = 0 |
| | 26678 | 9/23/78 | F1 = 0 | F2 = 49106 | F3 = 26086 | F4 = 0 |
| | 26778 | 9/24/78 | F1 = 0 | F2 = 40415 | F3 = 31410 | F4 = 0 |
| | 26878 | 9/25/78 | F1 = 0 | F2 = 46386 | F3 = 25334 | F4 = 0 |
| | 26978 | 9/26/78 | F1 = 0 | F2 = 47700 | F3 = 25899 | F4 = 0 |
| Z827 | 27078 | 9/27/78 | F1 = 0 | F2 = 56680 | F3 = 29206 | F4 = 0 |
| | 27178 | 9/28/78 | F1 = 0 | F2 = 47122 | F3 = 26971 | F4 = 0 |
| | 27278 | 9/29/78 | F1 = 0 | F2 = 46481 | F3 = 25282 | F4 = 0 |
| | 27378 | 9/30/78 | F1 = 0 | F2 = 45131 | F3 = 27750 | F4 = 0 |
| | 27478 | 10/ 1/78 | F1 = 0 | F2 = 44037 | F3 = 27697 | F4 = 0 |
| | 27578 | 10/ 2/78 | F1 = 0 | F2 = 46533 | F3 = 29287 | F4 = 0 |
| | 27678 | 10/ 3/78 | F1 = 0 | F2 = 42239 | F3 = 27360 | F4 = 0 |
| | 27778 | 10/ 4/78 | F1 = 0 | F2 = 44414 | F3 = 27098 | F4 = 0 |
| | 27878 | 10/ 5/78 | F1 = 0 | F2 = 46476 | F3 = 34249 | F4 = 0 |
| | 27978 | 10/ 6/78 | F1 = 0 | F2 = 42627 | F3 = 25085 | F4 = 0 |
| Z828 | 28078 | 10/ 7/78 | F1 = 0 | F2 = 44954 | F3 = 26172 | F4 = 0 |
| | 28178 | 10/ 8/78 | F1 = 0 | F2 = 31840 | F3 = 19009 | F4 = 0 |

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|-------|----------|----------|------------|------------|-------------------|
| 28278 | 10/ 9/78 | F1 = 0 | F2 = 12273 | F3 = 8815 | F4 = 0 |
| 28378 | 10/10/78 | F1 = 0 | F2 = 46519 | F3 = 31148 | F4 = 0 |
| 28478 | 10/11/78 | F1 = 0 | F2 = 44819 | F3 = 25903 | F4 = 0 |
| 28578 | 10/12/78 | F1 = 0 | F2 = 43887 | F3 = 30450 | F4 = 0 |
| 28678 | 10/13/78 | F1 = 0 | F2 = 45037 | F3 = 24991 | F4 = 0 |
| 28778 | 10/14/78 | F1 = 0 | F2 = 46724 | F3 = 26202 | F4 = 0 |
| 28878 | 10/15/78 | F1 = 0 | F2 = 48297 | F3 = 26561 | F4 = 0 |
| 28978 | 10/16/78 | F1 = 0 | F2 = 35524 | F3 = 13993 | F4 = 0 |
| Z829 | 29078 | 10/17/78 | F1 = 0 | F2 = 46813 | F3 = 0 F4 = 0 |
| | 29178 | 10/18/78 | F1 = 0 | F2 = 47448 | F3 = 20077 F4 = 0 |
| | 29278 | 10/19/78 | F1 = 0 | F2 = 45088 | F3 = 43162 F4 = 0 |
| | 29378 | 10/20/78 | F1 = 0 | F2 = 41538 | F3 = 38446 F4 = 0 |
| | 29478 | 10/21/78 | F1 = 0 | F2 = 41821 | F3 = 40041 F4 = 0 |
| | 29578 | 10/22/78 | F1 = 0 | F2 = 34739 | F3 = 41219 F4 = 0 |
| | 29678 | 10/23/78 | F1 = 0 | F2 = 42883 | F3 = 33824 F4 = 0 |
| | 29778 | 10/24/78 | F1 = 0 | F2 = 24911 | F3 = 39569 F4 = 0 |
| | 29878 | 10/25/78 | F1 = 0 | F2 = 38525 | F3 = 43465 F4 = 0 |
| | 29978 | 10/26/78 | F1 = 0 | F2 = 49156 | F3 = 43545 F4 = 0 |
| Z880 | 30078 | 10/27/78 | F1 = 0 | F2 = 50353 | F3 = 43837 F4 = 0 |
| | 30178 | 10/28/78 | F1 = 0 | F2 = 50100 | F3 = 43510 F4 = 0 |
| | 30278 | 10/29/78 | F1 = 0 | F2 = 51250 | F3 = 43527 F4 = 0 |
| | 30378 | 10/30/78 | F1 = 0 | F2 = 49224 | F3 = 44405 F4 = 0 |
| | 30478 | 10/31/78 | F1 = 0 | F2 = 51713 | F3 = 45339 F4 = 0 |
| | 30578 | 11/ 1/78 | F1 = 0 | F2 = 48326 | F3 = 45348 F4 = 0 |
| | 30678 | 11/ 2/78 | F1 = 0 | F2 = 51159 | F3 = 44969 F4 = 0 |
| | 30778 | 11/ 3/78 | F1 = 0 | F2 = 51751 | F3 = 45484 F4 = 0 |
| | 30878 | 11/ 4/78 | F1 = 0 | F2 = 52118 | F3 = 45356 F4 = 0 |
| | 30978 | 11/ 5/78 | F1 = 0 | F2 = 51770 | F3 = 45520 F4 = 0 |
| Z831 | 31078 | 11/ 6/78 | F1 = 0 | F2 = 48289 | F3 = 38753 F4 = 0 |
| | 31178 | 11/ 7/78 | F1 = 0 | F2 = 51600 | F3 = 45652 F4 = 0 |
| | 31278 | 11/ 8/78 | F1 = 0 | F2 = 53184 | F3 = 45622 F4 = 0 |
| | 31378 | 11/ 9/78 | F1 = 0 | F2 = 48315 | F3 = 44732 F4 = 0 |
| | 31478 | 11/10/78 | F1 = 0 | F2 = 51730 | F3 = 45220 F4 = 0 |
| | 31578 | 11/11/78 | F1 = 0 | F2 = 49236 | F3 = 44883 F4 = 0 |
| | 31678 | 11/12/78 | F1 = 0 | F2 = 50129 | F3 = 45237 F4 = 0 |
| | 31778 | 11/13/78 | F1 = 0 | F2 = 52049 | F3 = 44903 F4 = 0 |
| | 31878 | 11/14/78 | F1 = 0 | F2 = 51793 | F3 = 37161 F4 = 0 |
| | 31978 | 11/15/78 | F1 = 0 | F2 = 51811 | F3 = 45400 F4 = 0 |
| Z832 | 32078 | 11/16/78 | F1 = 0 | F2 = 51346 | F3 = 44830 F4 = 0 |
| | 32078 | 11/16/78 | F1 = 0 | F2 = 51346 | F3 = 44830 F4 = 0 |
| | 32178 | 11/17/78 | F1 = 0 | F2 = 50325 | F3 = 44605 F4 = 0 |
| | 32178 | 11/17/78 | F1 = 0 | F2 = 50325 | F3 = 44605 F4 = 0 |
| | 32278 | 11/18/78 | F1 = 0 | F2 = 51988 | F3 = 45186 F4 = 0 |
| | 32278 | 11/18/78 | F1 = 0 | F2 = 51988 | F3 = 45186 F4 = 0 |
| | 32378 | 11/19/78 | F1 = 0 | F2 = 47987 | F3 = 45305 F4 = 0 |
| | 32378 | 11/19/78 | F1 = 0 | F2 = 47987 | F3 = 45305 F4 = 0 |
| | 32478 | 11/20/78 | F1 = 0 | F2 = 50233 | F3 = 44899 F4 = 0 |
| | 32578 | 11/21/78 | F1 = 0 | F2 = 51781 | F3 = 44499 F4 = 0 |
| | 32678 | 11/22/78 | F1 = 0 | F2 = 43741 | F3 = 45310 F4 = 0 |

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|------|-------|----------|------|---|------------|------------|------|---|
| | 32778 | 11/23/78 | F1 = | 0 | F2 = 51461 | F3 = 44893 | F4 = | 0 |
| | 32878 | 11/24/78 | F1 = | 0 | F2 = 47925 | F3 = 45084 | F4 = | 0 |
| | 32978 | 11/25/78 | F1 = | 0 | F2 = 51446 | F3 = 45284 | F4 = | 0 |
| Z833 | 33078 | 11/26/78 | F1 = | 0 | F2 = 51378 | F3 = 45632 | F4 = | 0 |
| | 33178 | 11/27/78 | F1 = | 0 | F2 = 51387 | F3 = 33473 | F4 = | 0 |
| | 33278 | 11/28/78 | F1 = | 0 | F2 = 47484 | F3 = 44355 | F4 = | 0 |
| | 33378 | 11/29/78 | F1 = | 0 | F2 = 50148 | F3 = 45266 | F4 = | 0 |
| | 33478 | 11/30/78 | F1 = | 0 | F2 = 50830 | F3 = 40816 | F4 = | 0 |
| | 33578 | 12/ 1/78 | F1 = | 0 | F2 = 46041 | F3 = 45150 | F4 = | 0 |
| | 33678 | 12/ 2/78 | F1 = | 0 | F2 = 51502 | F3 = 46035 | F4 = | 0 |
| | 33778 | 12/ 3/78 | F1 = | 0 | F2 = 51330 | F3 = 34009 | F4 = | 0 |
| | 33878 | 12/ 4/78 | F1 = | 0 | F2 = 50850 | F3 = 36488 | F4 = | 0 |
| | 33978 | 12/ 5/78 | F1 = | 0 | F2 = 50572 | F3 = 37464 | F4 = | 0 |
| Z834 | 34078 | 12/ 6/78 | F1 = | 0 | F2 = 48148 | F3 = 45284 | F4 = | 0 |
| | 34178 | 12/ 7/78 | F1 = | 0 | F2 = 42282 | F3 = 42566 | F4 = | 0 |
| | 34278 | 12/ 8/78 | F1 = | 0 | F2 = 36227 | F3 = 44570 | F4 = | 0 |
| | 34378 | 12/ 9/78 | F1 = | 0 | F2 = 36643 | F3 = 53700 | F4 = | 0 |
| | 34478 | 12/10/78 | F1 = | 0 | F2 = 38379 | F3 = 43115 | F4 = | 0 |
| | 34578 | 12/11/78 | F1 = | 0 | F2 = 38877 | F3 = 43149 | F4 = | 0 |
| | 34678 | 12/12/78 | F1 = | 0 | F2 = 47436 | F3 = 44972 | F4 = | 0 |
| | 34778 | 12/13/78 | F1 = | 0 | F2 = 50176 | F3 = 45002 | F4 = | 0 |
| | 34878 | 12/14/78 | F1 = | 0 | F2 = 50689 | F3 = 44950 | F4 = | 0 |
| | 34978 | 12/15/78 | F1 = | 0 | F2 = 51041 | F3 = 44498 | F4 = | 0 |
| Z835 | 35078 | 12/16/78 | F1 = | 0 | F2 = 43610 | F3 = 44853 | F4 = | 0 |
| | 35178 | 12/17/78 | F1 = | 0 | F2 = 37070 | F3 = 38325 | F4 = | 0 |
| | 35278 | 12/18/78 | F1 = | 0 | F2 = 51656 | F3 = 45116 | F4 = | 0 |
| | 35378 | 12/19/78 | F1 = | 0 | F2 = 50166 | F3 = 45245 | F4 = | 0 |
| | 35478 | 12/20/78 | F1 = | 0 | F2 = 51257 | F3 = 45532 | F4 = | 0 |
| | 35578 | 12/21/78 | F1 = | 0 | F2 = 51250 | F3 = 44911 | F4 = | 0 |
| | 35678 | 12/22/78 | F1 = | 0 | F2 = 36258 | F3 = 31813 | F4 = | 0 |
| | 35778 | 12/23/78 | F1 = | 0 | F2 = 11730 | F3 = 14353 | F4 = | 0 |
| | 35878 | 12/24/78 | F1 = | 0 | F2 = 49404 | F3 = 45181 | F4 = | 0 |
| | 35978 | 12/25/78 | F1 = | 0 | F2 = 47641 | F3 = 45103 | F4 = | 0 |
| Z836 | 36078 | 12/26/78 | F1 = | 0 | F2 = 38002 | F3 = 28872 | F4 = | 0 |
| | 36278 | 12/28/78 | F1 = | 0 | F2 = 35301 | F3 = 33758 | F4 = | 0 |
| | 36278 | 12/28/78 | F1 = | 0 | F2 = 35301 | F3 = 33758 | F4 = | 0 |
| | 36378 | 12/29/78 | F1 = | 0 | F2 = 48187 | F3 = 44718 | F4 = | 0 |
| | 36378 | 12/29/78 | F1 = | 0 | F2 = 48187 | F3 = 44718 | F4 = | 0 |
| | 36478 | 12/30/78 | F1 = | 0 | F2 = 42172 | F3 = 44667 | F4 = | 0 |
| | 36478 | 12/30/78 | F1 = | 0 | F2 = 42172 | F3 = 44667 | F4 = | 0 |
| | 36578 | 12/31/78 | F1 = | 0 | F2 = 51977 | F3 = 42068 | F4 = | 0 |
| | 36578 | 12/31/78 | F1 = | 0 | F2 = 51977 | F3 = 42068 | F4 = | 0 |
| Z900 | 00179 | 1/ 1/79 | F1 = | 0 | F2 = 48050 | F3 = 42228 | F4 = | 0 |
| | 00279 | 1/ 2/79 | F1 = | 0 | F2 = 43656 | F3 = 41958 | F4 = | 0 |
| | 00379 | 1/ 3/79 | F1 = | 0 | F2 = 48538 | F3 = 41909 | F4 = | 0 |
| | 00479 | 1/ 4/79 | F1 = | 0 | F2 = 43617 | F3 = 41413 | F4 = | 0 |
| | 00579 | 1/ 5/79 | F1 = | 0 | F2 = 41361 | F3 = 41576 | F4 = | 0 |
| | 00679 | 1/ 6/79 | F1 = | 0 | F2 = 43443 | F3 = 41915 | F4 = | 0 |

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|------|-------|---------|------|---|------------|------------|------|---|
| | 00779 | 1/ 7/79 | F1 = | 0 | F2 = 45574 | F3 = 41346 | F4 = | 0 |
| | 00879 | 1/ 8/79 | F1 = | 0 | F2 = 30863 | F3 = 29260 | F4 = | 0 |
| | 00979 | 1/ 9/79 | F1 = | 0 | F2 = 16778 | F3 = 25138 | F4 = | 0 |
| | 00979 | 1/ 9/79 | F1 = | 0 | F2 = 16778 | F3 = 25138 | F4 = | 0 |
| Z901 | 01179 | 1/11/79 | F1 = | 0 | F2 = 39347 | F3 = 41343 | F4 = | 0 |
| | 01279 | 1/12/79 | F1 = | 0 | F2 = 43477 | F3 = 41558 | F4 = | 0 |
| | 01379 | 1/13/79 | F1 = | 0 | F2 = 43000 | F3 = 41044 | F4 = | 0 |
| | 01479 | 1/14/79 | F1 = | 0 | F2 = 45610 | F3 = 41281 | F4 = | 0 |
| | 01579 | 1/15/79 | F1 = | 0 | F2 = 41265 | F3 = 42972 | F4 = | 0 |
| | 01679 | 1/16/79 | F1 = | 0 | F2 = 43064 | F3 = 42988 | F4 = | 0 |
| | 01779 | 1/17/79 | F1 = | 0 | F2 = 44960 | F3 = 42703 | F4 = | 0 |
| | 01879 | 1/18/79 | F1 = | 0 | F2 = 43221 | F3 = 42892 | F4 = | 0 |
| | 01979 | 1/19/79 | F1 = | 0 | F2 = 42164 | F3 = 41144 | F4 = | 0 |
| Z902 | 02079 | 1/20/79 | F1 = | 0 | F2 = 45827 | F3 = 41246 | F4 = | 0 |
| | 02179 | 1/21/79 | F1 = | 0 | F2 = 38112 | F3 = 40787 | F4 = | 0 |
| | 02279 | 1/22/79 | F1 = | 0 | F2 = 32776 | F3 = 41398 | F4 = | 0 |
| | 02379 | 1/23/79 | F1 = | 0 | F2 = 31327 | F3 = 41492 | F4 = | 0 |
| | 02479 | 1/24/79 | F1 = | 0 | F2 = 31880 | F3 = 40471 | F4 = | 0 |
| | 02579 | 1/25/79 | F1 = | 0 | F2 = 22814 | F3 = 31590 | F4 = | 0 |
| | 02679 | 1/26/79 | F1 = | 0 | F2 = 31443 | F3 = 40754 | F4 = | 0 |
| | 02779 | 1/27/79 | F1 = | 0 | F2 = 28340 | F3 = 40130 | F4 = | 0 |
| | 02879 | 1/28/79 | F1 = | 0 | F2 = 33726 | F3 = 41245 | F4 = | 0 |
| | 02979 | 1/29/79 | F1 = | 0 | F2 = 46175 | F3 = 42391 | F4 = | 0 |
| Z903 | 03079 | 1/30/79 | F1 = | 0 | F2 = 42623 | F3 = 46605 | F4 = | 0 |
| | 03179 | 1/31/79 | F1 = | 0 | F2 = 46547 | F3 = 41474 | F4 = | 0 |
| | 03279 | 2/ 1/79 | F1 = | 0 | F2 = 44126 | F3 = 38867 | F4 = | 0 |
| | 03379 | 2/ 2/79 | F1 = | 0 | F2 = 46172 | F3 = 38972 | F4 = | 0 |
| | 03479 | 2/ 3/79 | F1 = | 0 | F2 = 46709 | F3 = 40272 | F4 = | 0 |
| | 03579 | 2/ 4/79 | F1 = | 0 | F2 = 42921 | F3 = 40023 | F4 = | 0 |
| | 03679 | 2/ 5/79 | F1 = | 0 | F2 = 49039 | F3 = 39004 | F4 = | 0 |
| | 03779 | 2/ 6/79 | F1 = | 0 | F2 = 45248 | F3 = 40972 | F4 = | 0 |
| | 03879 | 2/ 7/79 | F1 = | 0 | F2 = 43360 | F3 = 41624 | F4 = | 0 |
| | 03979 | 2/ 8/79 | F1 = | 0 | F2 = 44250 | F3 = 41776 | F4 = | 0 |
| Z904 | 04079 | 2/ 9/79 | F1 = | 0 | F2 = 42491 | F3 = 41379 | F4 = | 0 |
| | 04179 | 2/10/79 | F1 = | 0 | F2 = 42178 | F3 = 38002 | F4 = | 0 |
| | 04279 | 2/11/79 | F1 = | 0 | F2 = 41722 | F3 = 38999 | F4 = | 0 |
| | 04379 | 2/12/79 | F1 = | 0 | F2 = 41988 | F3 = 36627 | F4 = | 0 |
| | 04479 | 2/13/79 | F1 = | 0 | F2 = 44435 | F3 = 41547 | F4 = | 0 |
| | 04579 | 2/14/79 | F1 = | 0 | F2 = 45403 | F3 = 41197 | F4 = | 0 |
| | 04679 | 2/15/79 | F1 = | 0 | F2 = 40425 | F3 = 38690 | F4 = | 0 |
| | 04779 | 2/16/79 | F1 = | 0 | F2 = 45811 | F3 = 38600 | F4 = | 0 |
| | 04879 | 2/17/79 | F1 = | 0 | F2 = 46079 | F3 = 41895 | F4 = | 0 |
| | 04979 | 2/18/79 | F1 = | 0 | F2 = 49415 | F3 = 28174 | F4 = | 0 |
| Z905 | 05079 | 2/19/79 | F1 = | 0 | F2 = 46820 | F3 = 42153 | F4 = | 0 |
| | 05179 | 2/20/79 | F1 = | 0 | F2 = 45561 | F3 = 42902 | F4 = | 0 |
| | 05279 | 2/21/79 | F1 = | 0 | F2 = 46042 | F3 = 38608 | F4 = | 0 |
| | 05379 | 2/22/79 | F1 = | 0 | F2 = 45180 | F3 = 48118 | F4 = | 0 |
| | 05479 | 2/23/79 | F1 = | 0 | F2 = 47645 | F3 = 43741 | F4 = | 0 |

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|----------|-----------|-------------|----------|------------|----------------|----------------|----------|-------|
| 05579 | 2/24/79 | F1 = | 0 | F2 = 49215 | F3 = 43711 | F4 = | 0 | |
| 05679 | 2/25/79 | F1 = | 0 | F2 = 46005 | F3 = 44064 | F4 = | 0 | |
| 05779 | 2/26/79 | F1 = | 0 | F2 = 42813 | F3 = 44153 | F4 = | 0 | |
| 05879 | 2/27/79 | F1 = | 0 | F2 = 43441 | F3 = 44411 | F4 = | 0 | |
| 05979 | 2/28/79 | F1 = | 0 | F2 = 36768 | F3 = 30484 | F4 = | 0 | |
| Z906 | 06079 | 3/ 1/79 | F1 = | 0 | F2 = 45899 | F3 = 44884 | F4 = | 0 |
| 06179 | 3/ 2/79 | F1 = | 0 | F2 = 47105 | F3 = 43815 | F4 = | 0 | |
| 06279 | 3/ 3/79 | F1 = | 0 | F2 = 35062 | F3 = 42257 | F4 = | 0 | |
| 06379 | 3/ 4/79 | F1 = | 0 | F2 = 41615 | F3 = 45714 | F4 = | 0 | |
| 06479 | 3/ 5/79 | F1 = | 0 | F2 = 36466 | F3 = 30365 | F4 = | 0 | |
| 06579 | 3/ 6/79 | F1 = | 0 | F2 = 41049 | F3 = 24014 | F4 = | 0 | |
| 06679 | 3/ 7/79 | F1 = | 0 | F2 = 49171 | F3 = 46595 | F4 = | 0 | |
| 06779 | 3/ 8/79 | F1 = | 0 | F2 = 49807 | F3 = 45369 | F4 = | 0 | |
| 06879 | 3/ 9/79 | F1 = | 0 | F2 = 45779 | F3 = 43744 | F4 = | 0 | |
| 06979 | 3/10/79 | F1 = | 0 | F2 = 48034 | F3 = 42405 | F4 = | 0 | |
| Z907 | 07079 | 3/11/79 | F1 = | 0 | F2 = 38576 | F3 = 46300 | F4 = | 0 |
| 07179 | 3/12/79 | F1 = | 0 | F2 = 35796 | F3 = 46836 | F4 = | 0 | |
| 07279 | 3/13/79 | F1 = | 0 | F2 = 45299 | F3 = 47179 | F4 = | 0 | |
| 07379 | 3/14/79 | F1 = | 0 | F2 = 45166 | F3 = 47031 | F4 = | 0 | |
| 07479 | 3/15/79 | F1 = | 0 | F2 = 48106 | F3 = 42197 | F4 = | 0 | |
| 07579 | 3/16/79 | F1 = | 0 | F2 = 41890 | F3 = 47215 | F4 = | 0 | |
| 07679 | 3/17/79 | F1 = | 0 | F2 = 22687 | F3 = 46921 | F4 = | 0 | |
| 07779 | 3/18/79 | F1 = | 0 | F2 = 36203 | F3 = 37874 | F4 = | 0 | |
| 07879 | 3/19/79 | F1 = | 0 | F2 = 50523 | F3 = 46786 | F4 = | 0 | |
| 07979 | 3/20/79 | F1 = | 0 | F2 = 50472 | F3 = 47469 | F4 = | 0 | |
| Z908 | 08079 | 3/21/79 | F1 = | 0 | F2 = 50053 | F3 = 47015 | F4 = | 0 |
| 08179 | 3/22/79 | F1 = | 0 | F2 = 46490 | F3 = 47090 | F4 = | 0 | |
| 08279 | 3/23/79 | F1 = | 0 | F2 = 45860 | F3 = 39834 | F4 = | 0 | |
| 08379 | 3/24/79 | F1 = | 0 | F2 = 40581 | F3 = 47027 | F4 = | 0 | |
| 08479 | 3/25/79 | F1 = | 0 | F2 = 29748 | F3 = 48850 | F4 = | 0 | |
| 08579 | 3/26/79 | F1 = | 0 | F2 = 46058 | F3 = 48331 | F4 = | 0 | |
| 08679 | 3/27/79 | F1 = | 0 | F2 = 49918 | F3 = 47488 | F4 = | 0 | |
| 08779 | 3/28/79 | F1 = | 0 | F2 = 51081 | F3 = 46790 | F4 = | 0 | |
| 08879 | 3/29/79 | F1 = | 0 | F2 = 49900 | F3 = 48273 | F4 = | 0 | |
| 08979 | 3/30/79 | F1 = | 0 | F2 = 50258 | F3 = 47888 | F4 = | 0 | |
| Z909 | 09079 | 3/31/79 | F1 = | 0 | F2 = 49098 | F3 = 48653 | F4 = | 0 |
| 09179 | 4/ 1/79 | F1 = | 0 | F2 = 49054 | F3 = 48503 | F4 = | 0 | |
| 09279 | 4/ 2/79 | F1 = | 0 | F2 = 47813 | F3 = 48569 | F4 = | 0 | |
| 09379 | 4/ 3/79 | F1 = | 0 | F2 = 49543 | F3 = 48144 | F4 = | 0 | |
| 09479 | 4/ 4/79 | F1 = | 0 | F2 = 49966 | F3 = 48636 | F4 = | 0 | |
| 09579 | 4/ 5/79 | F1 = | 0 | F2 = 47475 | F3 = 48355 | F4 = | 0 | |
| 09679 | 4/ 6/79 | F1 = | 0 | F2 = 45949 | F3 = 47080 | F4 = | 0 | |
| 09779 | 4/ 7/79 | F1 = | 0 | F2 = 50637 | F3 = 48267 | F4 = | 0 | |
| 09879 | 4/ 8/79 | F1 = | 0 | F2 = 47000 | F3 = 48080 | F4 = | 0 | |
| 09979 | 4/ 9/79 | F1 = | 0 | F2 = 37205 | F3 = 48619 | F4 = | 0 | |
| Z910 | 10079 | 4/10/79 | F1 = | 0 | F2 = 35342 | F3 = 48825 | F4 = | 0 |
| 10179 | 4/11/79 | F1 = | 0 | F2 = 28325 | F3 = 46949 | F4 = | 0 | |
| 10279 | 4/12/79 | F1 = | 0 | F2 = 41824 | F3 = 47239 | F4 = | 0 | |

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|----------|-----------|----------|-------|----------------|----------------|----------|-------|
| 10379 | 4/13/79 | F1 = | 0 | F2 = 39848 | F3 = 46806 | F4 = | 0 |
| 10479 | 4/14/79 | F1 = | 0 | F2 = 44117 | F3 = 47575 | F4 = | 0 |
| 10579 | 4/15/79 | F1 = | 0 | F2 = 48097 | F3 = 47076 | F4 = | 0 |
| 10679 | 4/16/79 | F1 = | 0 | F2 = 48455 | F3 = 47334 | F4 = | 0 |
| 10779 | 4/17/79 | F1 = | 0 | F2 = 41356 | F3 = 48335 | F4 = | 0 |
| 10879 | 4/18/79 | F1 = | 0 | F2 = 46585 | F3 = 47802 | F4 = | 0 |
| 10979 | 4/19/79 | F1 = | 0 | F2 = 39298 | F3 = 47807 | F4 = | 0 |
| Z911 | 11079 | F1 = | 0 | F2 = 48539 | F3 = 48100 | F4 = | 0 |
| 11179 | 4/21/79 | F1 = | 0 | F2 = 48578 | F3 = 47399 | F4 = | 0 |
| 11279 | 4/22/79 | F1 = | 0 | F2 = 47742 | F3 = 44283 | F4 = | 0 |
| 11379 | 4/23/79 | F1 = | 0 | F2 = 50755 | F3 = 48123 | F4 = | 0 |
| 11479 | 4/24/79 | F1 = | 0 | F2 = 44546 | F3 = 39150 | F4 = | 0 |
| 11579 | 4/25/79 | F1 = | 0 | F2 = 36123 | F3 = 48400 | F4 = | 0 |
| 11679 | 4/26/79 | F1 = | 0 | F2 = 31836 | F3 = 25746 | F4 = | 0 |
| 11779 | 4/27/79 | F1 = | 0 | F2 = 50887 | F3 = 43428 | F4 = | 0 |
| 11879 | 4/28/79 | F1 = | 0 | F2 = 42221 | F3 = 48411 | F4 = | 0 |
| 11979 | 4/29/79 | F1 = | 0 | F2 = 48702 | F3 = 47994 | F4 = | 0 |
| Z912 | 12079 | F1 = | 0 | F2 = 39475 | F3 = 49040 | F4 = | 0 |
| 12179 | 5/ 1/79 | F1 = | 0 | F2 = 47099 | F3 = 39610 | F4 = | 0 |
| 12279 | 5/ 2/79 | F1 = | 0 | F2 = 51181 | F3 = 48289 | F4 = | 0 |
| 12379 | 5/ 3/79 | F1 = | 0 | F2 = 50807 | F3 = 46242 | F4 = | 0 |
| 12479 | 5/ 4/79 | F1 = | 0 | F2 = 41073 | F3 = 47699 | F4 = | 0 |
| 12579 | 5/ 5/79 | F1 = | 0 | F2 = 48017 | F3 = 48188 | F4 = | 0 |
| 12679 | 5/ 6/79 | F1 = | 0 | F2 = 47801 | F3 = 47852 | F4 = | 0 |
| 12779 | 5/ 7/79 | F1 = | 0 | F2 = 44334 | F3 = 47069 | F4 = | 0 |
| 12879 | 5/ 8/79 | F1 = | 0 | F2 = 42920 | F3 = 31433 | F4 = | 0 |
| 12979 | 5/ 9/79 | F1 = | 0 | F2 = 44854 | F3 = 48651 | F4 = | 0 |
| Z913 | 13079 | F1 = | 0 | F2 = 46174 | F3 = 47390 | F4 = | 0 |
| 13179 | 5/11/79 | F1 = | 0 | F2 = 49045 | F3 = 47400 | F4 = | 0 |
| 13279 | 5/12/79 | F1 = | 0 | F2 = 30148 | F3 = 48419 | F4 = | 0 |
| 13379 | 5/13/79 | F1 = | 0 | F2 = 43293 | F3 = 48295 | F4 = | 0 |
| 13479 | 5/14/79 | F1 = | 0 | F2 = 53523 | F3 = 45794 | F4 = | 0 |
| 13579 | 5/15/79 | F1 = | 0 | F2 = 37398 | F3 = 46511 | F4 = | 0 |
| 13679 | 5/16/79 | F1 = | 0 | F2 = 43809 | F3 = 48165 | F4 = | 0 |
| 13779 | 5/17/79 | F1 = | 0 | F2 = 48822 | F3 = 47658 | F4 = | 0 |
| 13879 | 5/18/79 | F1 = | 0 | F2 = 33112 | F3 = 28901 | F4 = | 0 |
| 13979 | 5/19/79 | F1 = | 0 | F2 = 11142 | F3 = 13970 | F4 = | 0 |
| Z914 | 14079 | F1 = | 0 | F2 = 48557 | F3 = 47436 | F4 = | 0 |
| 14179 | 5/21/79 | F1 = | 0 | F2 = 45998 | F3 = 47265 | F4 = | 0 |
| 14279 | 5/22/79 | F1 = | 0 | F2 = 46262 | F3 = 45661 | F4 = | 0 |
| 14379 | 5/23/79 | F1 = | 0 | F2 = 41785 | F3 = 46642 | F4 = | 0 |
| 14479 | 5/24/79 | F1 = | 0 | F2 = 49894 | F3 = 47465 | F4 = | 0 |
| 14579 | 5/25/79 | F1 = | 0 | F2 = 44417 | F3 = 47710 | F4 = | 0 |
| 14679 | 5/26/79 | F1 = | 0 | F2 = 37535 | F3 = 47633 | F4 = | 0 |
| 14779 | 5/27/79 | F1 = | 0 | F2 = 42638 | F3 = 47841 | F4 = | 0 |
| 14879 | 5/28/79 | F1 = | 0 | F2 = 45740 | F3 = 46460 | F4 = | 0 |
| 14979 | 5/29/79 | F1 = | 0 | F2 = 35643 | F3 = 43936 | F4 = | 0 |
| Z915 | 15079 | F1 = | 0 | F2 = 46253 | F3 = 44326 | F4 = | 0 |

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|-------|---------|---------|------|------------|------------|------------|------|-------|
| 15179 | 5/31/79 | F1 = | 0 | F2 = 41481 | F3 = 47580 | F4 = | 0 | |
| 15279 | 6/ 1/79 | F1 = | 0 | F2 = 45667 | F3 = 47159 | F4 = | 0 | |
| 15379 | 6/ 2/79 | F1 = | 0 | F2 = 35922 | F3 = 47667 | F4 = | 0 | |
| 15479 | 6/ 3/79 | F1 = | 0 | F2 = 48427 | F3 = 47050 | F4 = | 0 | |
| 15579 | 6/ 4/79 | F1 = | 0 | F2 = 40367 | F3 = 46382 | F4 = | 0 | |
| 15679 | 6/ 5/79 | F1 = | 0 | F2 = 52355 | F3 = 46794 | F4 = | 0 | |
| 15779 | 6/ 6/79 | F1 = | 0 | F2 = 44767 | F3 = 46788 | F4 = | 0 | |
| 15879 | 6/ 7/79 | F1 = | 0 | F2 = 44239 | F3 = 46410 | F4 = | 0 | |
| 15979 | 6/ 8/79 | F1 = | 0 | F2 = 47059 | F3 = 37955 | F4 = | 0 | |
| Z916 | 16079 | 6/ 9/79 | F1 = | 0 | F2 = 37417 | F3 = 38385 | F4 = | 0 |
| | 16179 | 6/10/79 | F1 = | 0 | F2 = 29247 | F3 = 46597 | F4 = | 0 |
| | 16279 | 6/11/79 | F1 = | 0 | F2 = 36289 | F3 = 29971 | F4 = | 0 |
| | 16379 | 6/12/79 | F1 = | 0 | F2 = 33212 | F3 = 34526 | F4 = | 0 |
| | 16479 | 6/13/79 | F1 = | 0 | F2 = 38833 | F3 = 47290 | F4 = | 0 |
| | 16579 | 6/14/79 | F1 = | 0 | F2 = 33471 | F3 = 47088 | F4 = | 0 |
| | 16679 | 6/15/79 | F1 = | 0 | F2 = 40175 | F3 = 47294 | F4 = | 0 |
| | 16779 | 6/16/79 | F1 = | 0 | F2 = 37717 | F3 = 34278 | F4 = | 0 |
| | 16879 | 6/17/79 | F1 = | 0 | F2 = 43355 | F3 = 46883 | F4 = | 18636 |
| | 16979 | 6/18/79 | F1 = | 0 | F2 = 40106 | F3 = 46368 | F4 = | 59674 |
| Z917 | 17079 | 6/19/79 | F1 = | 0 | F2 = 49698 | F3 = 47231 | F4 = | 58975 |
| | 17179 | 6/20/79 | F1 = | 0 | F2 = 28261 | F3 = 34888 | F4 = | 39974 |
| | 17279 | 6/21/79 | F1 = | 0 | F2 = 41559 | F3 = 41406 | F4 = | 40247 |
| | 17379 | 6/22/79 | F1 = | 0 | F2 = 40835 | F3 = 40107 | F4 = | 59445 |
| | 17479 | 6/23/79 | F1 = | 0 | F2 = 46683 | F3 = 47144 | F4 = | 58963 |
| | 17579 | 6/24/79 | F1 = | 0 | F2 = 51720 | F3 = 43425 | F4 = | 59231 |
| | 17679 | 6/25/79 | F1 = | 0 | F2 = 32675 | F3 = 47407 | F4 = | 56342 |
| | 17779 | 6/26/79 | F1 = | 0 | F2 = 50310 | F3 = 46853 | F4 = | 35745 |
| | 17879 | 6/27/79 | F1 = | 0 | F2 = 25692 | F3 = 47027 | F4 = | 43053 |
| | 17979 | 6/28/79 | F1 = | 0 | F2 = 51046 | F3 = 42692 | F4 = | 55184 |
| Z918 | 18079 | 6/29/79 | F1 = | 0 | F2 = 47138 | F3 = 46108 | F4 = | 43057 |
| | 18179 | 6/30/79 | F1 = | 0 | F2 = 45815 | F3 = 43071 | F4 = | 33437 |
| | 18279 | 7/ 1/79 | F1 = | 0 | F2 = 34189 | F3 = 27847 | F4 = | 24666 |
| | 18379 | 7/ 2/79 | F1 = | 0 | F2 = 17571 | F3 = 16497 | F4 = | 17906 |
| | 18479 | 7/ 3/79 | F1 = | 0 | F2 = 39305 | F3 = 40994 | F4 = | 46234 |
| | 18579 | 7/ 4/79 | F1 = | 0 | F2 = 38488 | F3 = 42872 | F4 = | 59907 |
| | 18679 | 7/ 5/79 | F1 = | 0 | F2 = 49540 | F3 = 45758 | F4 = | 60152 |
| | 18779 | 7/ 6/79 | F1 = | 0 | F2 = 48573 | F3 = 47104 | F4 = | 55877 |
| | 18879 | 7/ 7/79 | F1 = | 0 | F2 = 30450 | F3 = 30333 | F4 = | 19562 |
| | 18979 | 7/ 8/79 | F1 = | 0 | F2 = 16483 | F3 = 16924 | F4 = | 6542 |
| Z919 | 19079 | 7/ 9/79 | F1 = | 0 | F2 = 46432 | F3 = 31879 | F4 = | 54325 |
| | 19179 | 7/10/79 | F1 = | 0 | F2 = 55105 | F3 = 51597 | F4 = | 66998 |
| | 19279 | 7/11/79 | F1 = | 0 | F2 = 46718 | F3 = 41827 | F4 = | 47929 |
| | 19379 | 7/12/79 | F1 = | 0 | F2 = 42952 | F3 = 47217 | F4 = | 76274 |
| | 19479 | 7/13/79 | F1 = | 0 | F2 = 38448 | F3 = 35772 | F4 = | 47736 |
| | 19579 | 7/14/79 | F1 = | 0 | F2 = 42280 | F3 = 43029 | F4 = | 66230 |
| | 19679 | 7/15/79 | F1 = | 0 | F2 = 47989 | F3 = 47837 | F4 = | 59373 |
| | 19779 | 7/16/79 | F1 = | 0 | F2 = 24771 | F3 = 42633 | F4 = | 60834 |
| | 19879 | 7/17/79 | F1 = | 0 | F2 = 31305 | F3 = 48285 | F4 = | 55387 |
| | 19979 | 7/18/79 | F1 = | 0 | F2 = 34228 | F3 = 43293 | F4 = | 61052 |

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|------|-------|---------|--------|------------|------------|------------|
| Z920 | 20079 | 7/19/79 | F1 = 0 | F2 = 33548 | F3 = 40378 | F4 = 50798 |
| | 20179 | 7/20/79 | F1 = 0 | F2 = 35530 | F3 = 48443 | F4 = 57184 |
| | 20279 | 7/21/79 | F1 = 0 | F2 = 32461 | F3 = 34059 | F4 = 60251 |
| | 20379 | 7/22/79 | F1 = 0 | F2 = 41965 | F3 = 40568 | F4 = 56230 |
| | 20479 | 7/23/79 | F1 = 0 | F2 = 30600 | F3 = 32517 | F4 = 54453 |
| | 20579 | 7/24/79 | F1 = 0 | F2 = 25269 | F3 = 45641 | F4 = 37260 |
| | 20679 | 7/25/79 | F1 = 0 | F2 = 32461 | F3 = 42548 | F4 = 50808 |
| | 20779 | 7/26/79 | F1 = 0 | F2 = 22983 | F3 = 36854 | F4 = 50376 |
| | 20879 | 7/27/79 | F1 = 0 | F2 = 25758 | F3 = 37980 | F4 = 39332 |
| | 20979 | 7/28/79 | F1 = 0 | F2 = 28232 | F3 = 45827 | F4 = 60332 |
| Z921 | 21079 | 7/29/79 | F1 = 0 | F2 = 23548 | F3 = 49669 | F4 = 60953 |
| | 21179 | 7/30/79 | F1 = 0 | F2 = 20756 | F3 = 49447 | F4 = 54460 |
| | 21279 | 7/31/79 | F1 = 0 | F2 = 20713 | F3 = 44975 | F4 = 61227 |
| | 21379 | 8/ 1/79 | F1 = 0 | F2 = 17165 | F3 = 43811 | F4 = 62307 |
| | 21479 | 8/ 2/79 | F1 = 0 | F2 = 23149 | F3 = 46152 | F4 = 52078 |
| | 21579 | 8/ 3/79 | F1 = 0 | F2 = 53179 | F3 = 58366 | F4 = 68846 |
| | 21679 | 8/ 4/79 | F1 = 0 | F2 = 41477 | F3 = 49547 | F4 = 59840 |
| | 21779 | 8/ 5/79 | F1 = 0 | F2 = 27597 | F3 = 47714 | F4 = 62282 |
| | 21879 | 8/ 6/79 | F1 = 0 | F2 = 48611 | F3 = 48930 | F4 = 57883 |
| | 21979 | 8/ 7/79 | F1 = 0 | F2 = 38060 | F3 = 48712 | F4 = 58671 |
| Z922 | 22079 | 8/ 8/79 | F1 = 0 | F2 = 45272 | F3 = 49236 | F4 = 59407 |
| | 22179 | 8/ 9/79 | F1 = 0 | F2 = 38545 | F3 = 48821 | F4 = 56079 |
| | 22279 | 8/10/79 | F1 = 0 | F2 = 45128 | F3 = 47938 | F4 = 56021 |
| | 22379 | 8/11/79 | F1 = 0 | F2 = 48023 | F3 = 49675 | F4 = 61052 |
| | 22479 | 8/12/79 | F1 = 0 | F2 = 51659 | F3 = 49791 | F4 = 62052 |
| | 22579 | 8/13/79 | F1 = 0 | F2 = 36443 | F3 = 36127 | F4 = 42863 |
| | 22679 | 8/14/79 | F1 = 0 | F2 = 13068 | F3 = 14228 | F4 = 18834 |
| | 22779 | 8/15/79 | F1 = 0 | F2 = 46875 | F3 = 49805 | F4 = 61110 |
| | 22879 | 8/16/79 | F1 = 0 | F2 = 47252 | F3 = 48583 | F4 = 61433 |
| | 22979 | 8/17/79 | F1 = 0 | F2 = 48304 | F3 = 48989 | F4 = 62326 |
| Z923 | 23079 | 8/18/79 | F1 = 0 | F2 = 47571 | F3 = 48857 | F4 = 60575 |
| | 23179 | 8/19/79 | F1 = 0 | F2 = 26283 | F3 = 32096 | F4 = 50680 |
| | 23279 | 8/20/79 | F1 = 0 | F2 = 50552 | F3 = 54502 | F4 = 61868 |
| | 23379 | 8/21/79 | F1 = 0 | F2 = 2626 | F3 = 25616 | F4 = 30543 |
| | 23479 | 8/22/79 | F1 = 0 | F2 = 38648 | F3 = 41355 | F4 = 61153 |
| | 23579 | 8/23/79 | F1 = 0 | F2 = 48966 | F3 = 49573 | F4 = 52270 |
| | 23679 | 8/24/79 | F1 = 0 | F2 = 39902 | F3 = 49982 | F4 = 60982 |
| | 23779 | 8/25/79 | F1 = 0 | F2 = 51669 | F3 = 48784 | F4 = 60406 |
| | 23879 | 8/26/79 | F1 = 0 | F2 = 35982 | F3 = 37584 | F4 = 46039 |
| | 23979 | 8/27/79 | F1 = 0 | F2 = 13120 | F3 = 12618 | F4 = 16652 |
| Z924 | 24079 | 8/28/79 | F1 = 0 | F2 = 36104 | F3 = 39072 | F4 = 58005 |
| | 24179 | 8/29/79 | F1 = 0 | F2 = 36893 | F3 = 35020 | F4 = 38099 |
| | 24279 | 8/30/79 | F1 = 0 | F2 = 12534 | F3 = 11366 | F4 = 9922 |
| | 24379 | 8/31/79 | F1 = 0 | F2 = 47360 | F3 = 46792 | F4 = 61379 |
| | 24479 | 9/ 1/79 | F1 = 0 | F2 = 47147 | F3 = 48543 | F4 = 60783 |
| | 24579 | 9/ 2/79 | F1 = 0 | F2 = 50846 | F3 = 46593 | F4 = 61672 |
| | 24679 | 9/ 3/79 | F1 = 0 | F2 = 37496 | F3 = 46022 | F4 = 59966 |
| | 24779 | 9/ 4/79 | F1 = 0 | F2 = 36812 | F3 = 45967 | F4 = 61088 |
| | 24879 | 9/ 5/79 | F1 = 0 | F2 = 33777 | F3 = 49002 | F4 = 56665 |

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|------|-------|----------|--------|------------|------------|------------|
| | 24979 | 9/ 6/79 | F1 = 0 | F2 = 33328 | F3 = 46653 | F4 = 61350 |
| Z925 | 25079 | 9/ 7/79 | F1 = 0 | F2 = 32804 | F3 = 35068 | F4 = 44827 |
| | 25179 | 9/ 8/79 | F1 = 0 | F2 = 15744 | F3 = 14278 | F4 = 17500 |
| | 25279 | 9/ 9/79 | F1 = 0 | F2 = 38245 | F3 = 43860 | F4 = 60520 |
| | 25379 | 9/10/79 | F1 = 0 | F2 = 32731 | F3 = 49478 | F4 = 59508 |
| | 25479 | 9/11/79 | F1 = 0 | F2 = 33502 | F3 = 46047 | F4 = 54023 |
| | 25579 | 9/12/79 | F1 = 0 | F2 = 32638 | F3 = 43476 | F4 = 57887 |
| | 25679 | 9/13/79 | F1 = 0 | F2 = 35598 | F3 = 47451 | F4 = 62397 |
| | 25779 | 9/14/79 | F1 = 0 | F2 = 37285 | F3 = 49392 | F4 = 60026 |
| | 25879 | 9/15/79 | F1 = 0 | F2 = 52053 | F3 = 48785 | F4 = 59954 |
| | 25979 | 9/16/79 | F1 = 0 | F2 = 39277 | F3 = 48454 | F4 = 61928 |
| Z926 | 26079 | 9/17/79 | F1 = 0 | F2 = 33336 | F3 = 45458 | F4 = 58757 |
| | 26179 | 9/18/79 | F1 = 0 | F2 = 47499 | F3 = 49386 | F4 = 62114 |
| | 26279 | 9/19/79 | F1 = 0 | F2 = 35805 | F3 = 43861 | F4 = 58414 |
| | 26379 | 9/20/79 | F1 = 0 | F2 = 48002 | F3 = 39712 | F4 = 52374 |
| | 26479 | 9/21/79 | F1 = 0 | F2 = 47240 | F3 = 40003 | F4 = 47616 |
| | 26579 | 9/22/79 | F1 = 0 | F2 = 47482 | F3 = 42547 | F4 = 60718 |
| | 26679 | 9/23/79 | F1 = 0 | F2 = 47582 | F3 = 46631 | F4 = 61183 |
| | 26779 | 9/24/79 | F1 = 0 | F2 = 35843 | F3 = 44598 | F4 = 56159 |
| | 26879 | 9/25/79 | F1 = 0 | F2 = 39096 | F3 = 47168 | F4 = 54733 |
| | 26979 | 9/26/79 | F1 = 0 | F2 = 47297 | F3 = 47878 | F4 = 50456 |
| Z927 | 27079 | 9/27/79 | F1 = 0 | F2 = 48651 | F3 = 47432 | F4 = 51377 |
| | 27179 | 9/28/79 | F1 = 0 | F2 = 13599 | F3 = 44815 | F4 = 54447 |
| | 27279 | 9/29/79 | F1 = 0 | F2 = 0 | F3 = 44600 | F4 = 60001 |
| | 27379 | 9/30/79 | F1 = 0 | F2 = 14985 | F3 = 45637 | F4 = 60008 |
| | 27479 | 10/ 1/79 | F1 = 0 | F2 = 48582 | F3 = 40009 | F4 = 59869 |
| | 27579 | 10/ 2/79 | F1 = 0 | F2 = 36480 | F3 = 45383 | F4 = 58813 |
| | 27679 | 10/ 3/79 | F1 = 0 | F2 = 46837 | F3 = 39972 | F4 = 57443 |
| | 27779 | 10/ 4/79 | F1 = 0 | F2 = 51898 | F3 = 45027 | F4 = 61114 |
| | 27879 | 10/ 5/79 | F1 = 0 | F2 = 47402 | F3 = 39373 | F4 = 59215 |
| | 27979 | 10/ 6/79 | F1 = 0 | F2 = 47087 | F3 = 42836 | F4 = 59684 |
| Z928 | 28079 | 10/ 7/79 | F1 = 0 | F2 = 47688 | F3 = 45360 | F4 = 55193 |
| | 28179 | 10/ 8/79 | F1 = 0 | F2 = 47867 | F3 = 46564 | F4 = 59355 |
| | 28279 | 10/ 9/79 | F1 = 0 | F2 = 47406 | F3 = 46855 | F4 = 61720 |
| | 28379 | 10/10/79 | F1 = 0 | F2 = 36323 | F3 = 46077 | F4 = 59357 |
| | 28479 | 10/11/79 | F1 = 0 | F2 = 37426 | F3 = 46140 | F4 = 60832 |
| | 28579 | 10/12/79 | F1 = 0 | F2 = 42335 | F3 = 43809 | F4 = 60556 |
| | 28679 | 10/13/79 | F1 = 0 | F2 = 53523 | F3 = 44540 | F4 = 55209 |
| | 28779 | 10/14/79 | F1 = 0 | F2 = 50210 | F3 = 41385 | F4 = 60479 |
| | 28879 | 10/15/79 | F1 = 0 | F2 = 49203 | F3 = 41128 | F4 = 52082 |
| | 28979 | 10/16/79 | F1 = 0 | F2 = 51971 | F3 = 40479 | F4 = 50753 |
| Z929 | 29079 | 10/17/79 | F1 = 0 | F2 = 48510 | F3 = 44420 | F4 = 56388 |
| | 29179 | 10/18/79 | F1 = 0 | F2 = 37378 | F3 = 43902 | F4 = 60892 |
| | 29279 | 10/19/79 | F1 = 0 | F2 = 31268 | F3 = 44360 | F4 = 58754 |
| | 29379 | 10/20/79 | F1 = 0 | F2 = 47512 | F3 = 41602 | F4 = 47351 |
| | 29479 | 10/21/79 | F1 = 0 | F2 = 35481 | F3 = 44134 | F4 = 52514 |
| | 29579 | 10/22/79 | F1 = 0 | F2 = 42622 | F3 = 51577 | F4 = 57329 |
| | 29679 | 10/23/79 | F1 = 0 | F2 = 39581 | F3 = 45247 | F4 = 60577 |

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|------|-------|----------|------|---|------------|------------|------------|
| | 29779 | 10/24/79 | F1 = | 0 | F2 = 21954 | F3 = 44834 | F4 = 62263 |
| | 29879 | 10/25/79 | F1 = | 0 | F2 = 32408 | F3 = 45379 | F4 = 61866 |
| | 29979 | 10/26/79 | F1 = | 0 | F2 = 35115 | F3 = 45229 | F4 = 50140 |
| Z930 | 30079 | 10/27/79 | F1 = | 0 | F2 = 35052 | F3 = 46768 | F4 = 63759 |
| | 30179 | 10/28/79 | F1 = | 0 | F2 = 31024 | F3 = 46316 | F4 = 61123 |
| | 30279 | 10/29/79 | F1 = | 0 | F2 = 24035 | F3 = 45623 | F4 = 57355 |
| | 30379 | 10/30/79 | F1 = | 0 | F2 = 36033 | F3 = 46051 | F4 = 58495 |
| | 30479 | 10/31/79 | F1 = | 0 | F2 = 45999 | F3 = 45888 | F4 = 58035 |
| | 30579 | 11/ 1/79 | F1 = | 0 | F2 = 39925 | F3 = 45593 | F4 = 59802 |
| | 30679 | 11/ 2/79 | F1 = | 0 | F2 = 49629 | F3 = 41783 | F4 = 59500 |
| | 30779 | 11/ 3/79 | F1 = | 0 | F2 = 28996 | F3 = 40666 | F4 = 51910 |
| | 30879 | 11/ 4/79 | F1 = | 0 | F2 = 49502 | F3 = 46351 | F4 = 53770 |
| | 30979 | 11/ 5/79 | F1 = | 0 | F2 = 36059 | F3 = 47119 | F4 = 59108 |
| Z931 | 31079 | 11/ 6/79 | F1 = | 0 | F2 = 49770 | F3 = 44785 | F4 = 58529 |
| | 31179 | 11/ 7/79 | F1 = | 0 | F2 = 45501 | F3 = 46798 | F4 = 56027 |
| | 31279 | 11/ 8/79 | F1 = | 0 | F2 = 31253 | F3 = 46712 | F4 = 41664 |
| | 31379 | 11/ 9/79 | F1 = | 0 | F2 = 0 | F3 = 11313 | F4 = 16245 |
| | 31479 | 11/10/79 | F1 = | 0 | F2 = 64022 | F3 = 65046 | F4 = 88308 |
| | 31579 | 11/11/79 | F1 = | 0 | F2 = 13856 | F3 = 12817 | F4 = 16769 |
| | 31679 | 11/12/79 | F1 = | 0 | F2 = 39199 | F3 = 47425 | F4 = 60683 |
| | 31779 | 11/13/79 | F1 = | 0 | F2 = 35962 | F3 = 44216 | F4 = 59556 |
| | 31879 | 11/14/79 | F1 = | 0 | F2 = 27261 | F3 = 46614 | F4 = 61122 |
| | 31979 | 11/15/79 | F1 = | 0 | F2 = 37810 | F3 = 45790 | F4 = 57297 |
| Z932 | 32079 | 11/16/79 | F1 = | 0 | F2 = 50118 | F3 = 47388 | F4 = 54901 |
| | 32179 | 11/17/79 | F1 = | 0 | F2 = 39319 | F3 = 30691 | F4 = 41511 |
| | 32279 | 11/18/79 | F1 = | 0 | F2 = 14819 | F3 = 14373 | F4 = 19518 |
| | 32379 | 11/19/79 | F1 = | 0 | F2 = 49598 | F3 = 43864 | F4 = 56391 |
| | 32479 | 11/20/79 | F1 = | 0 | F2 = 33259 | F3 = 43910 | F4 = 56396 |
| | 32579 | 11/21/79 | F1 = | 0 | F2 = 44186 | F3 = 45258 | F4 = 57448 |
| | 32679 | 11/22/79 | F1 = | 0 | F2 = 49520 | F3 = 48106 | F4 = 59443 |
| | 32779 | 11/23/79 | F1 = | 0 | F2 = 49466 | F3 = 45070 | F4 = 59087 |
| | 32879 | 11/24/79 | F1 = | 0 | F2 = 29301 | F3 = 44339 | F4 = 60173 |
| | 32979 | 11/25/79 | F1 = | 0 | F2 = 82449 | F3 = 47756 | F4 = 60035 |
| Z933 | 33079 | 11/26/79 | F1 = | 0 | F2 = 41005 | F3 = 47963 | F4 = 60914 |
| | 33179 | 11/27/79 | F1 = | 0 | F2 = 25571 | F3 = 30754 | F4 = 42635 |
| | 33279 | 11/28/79 | F1 = | 0 | F2 = 14213 | F3 = 14450 | F4 = 18582 |
| | 33379 | 11/29/79 | F1 = | 0 | F2 = 40276 | F3 = 44548 | F4 = 61547 |
| | 33479 | 11/30/79 | F1 = | 0 | F2 = 46745 | F3 = 48948 | F4 = 48002 |
| | 33579 | 12/ 1/79 | F1 = | 0 | F2 = 43006 | F3 = 45690 | F4 = 61934 |
| | 33679 | 12/ 2/79 | F1 = | 0 | F2 = 44507 | F3 = 47723 | F4 = 60369 |
| | 33779 | 12/ 3/79 | F1 = | 0 | F2 = 38930 | F3 = 40026 | F4 = 62287 |
| | 33879 | 12/ 4/79 | F1 = | 0 | F2 = 51185 | F3 = 43057 | F4 = 56318 |
| | 33979 | 12/ 5/79 | F1 = | 0 | F2 = 47821 | F3 = 42089 | F4 = 57093 |
| Z934 | 34079 | 12/ 6/79 | F1 = | 0 | F2 = 46131 | F3 = 35704 | F4 = 62262 |
| | 34179 | 12/ 7/79 | F1 = | 0 | F2 = 37329 | F3 = 35828 | F4 = 59091 |
| | 34279 | 12/ 8/79 | F1 = | 0 | F2 = 42180 | F3 = 41702 | F4 = 52291 |
| | 34379 | 12/ 9/79 | F1 = | 0 | F2 = 38098 | F3 = 41306 | F4 = 62323 |
| | 34479 | 12/10/79 | F1 = | 0 | F2 = 43162 | F3 = 44285 | F4 = 58510 |

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|------|-------|----------|------|---|------------|------------|------------|
| | 34579 | 12/11/79 | F1 = | 0 | F2 = 45677 | F3 = 42950 | F4 = 61605 |
| | 34679 | 12/12/79 | F1 = | 0 | F2 = 41850 | F3 = 41724 | F4 = 59452 |
| | 34779 | 12/13/79 | F1 = | 0 | F2 = 36705 | F3 = 27127 | F4 = 41520 |
| | 34879 | 12/14/79 | F1 = | 0 | F2 = 13679 | F3 = 11891 | F4 = 18642 |
| | 34979 | 12/15/79 | F1 = | 0 | F2 = 46262 | F3 = 44523 | F4 = 61086 |
| Z935 | 35079 | 12/16/79 | F1 = | 0 | F2 = 49583 | F3 = 47663 | F4 = 76657 |
| | 35179 | 12/17/79 | F1 = | 0 | F2 = 44661 | F3 = 48060 | F4 = 60800 |
| | 35279 | 12/18/79 | F1 = | 0 | F2 = 21505 | F3 = 32470 | F4 = 42954 |
| | 35379 | 12/19/79 | F1 = | 0 | F2 = 13183 | F3 = 11950 | F4 = 18598 |
| | 35479 | 12/20/79 | F1 = | 0 | F2 = 38146 | F3 = 47604 | F4 = 58044 |
| | 35579 | 12/21/79 | F1 = | 0 | F2 = 42660 | F3 = 35749 | F4 = 56832 |
| | 35679 | 12/22/79 | F1 = | 0 | F2 = 44825 | F3 = 47080 | F4 = 61469 |
| | 35779 | 12/23/79 | F1 = | 0 | F2 = 33603 | F3 = 46302 | F4 = 63263 |
| | 35879 | 12/24/79 | F1 = | 0 | F2 = 47433 | F3 = 47865 | F4 = 55751 |
| | 35979 | 12/25/79 | F1 = | 0 | F2 = 40868 | F3 = 48346 | F4 = 56703 |
| Z936 | 36079 | 12/26/79 | F1 = | 0 | F2 = 38486 | F3 = 48037 | F4 = 58114 |
| | 36179 | 12/27/79 | F1 = | 0 | F2 = 21378 | F3 = 27178 | F4 = 52919 |
| | 36279 | 12/28/79 | F1 = | 0 | F2 = 40933 | F3 = 44161 | F4 = 59395 |
| | 36379 | 12/29/79 | F1 = | 0 | F2 = 43200 | F3 = 48145 | F4 = 11314 |
| | 36479 | 12/30/79 | F1 = | 0 | F2 = 46011 | F3 = 44548 | F4 = 0 |
| | 36579 | 12/31/79 | F1 = | 0 | F2 = 50295 | F3 = 48096 | F4 = 0 |
| Z000 | 00180 | 1/ 1/80 | F1 = | 0 | F2 = 52040 | F3 = 43687 | F4 = 0 |
| | 00280 | 1/ 2/80 | F1 = | 0 | F2 = 55018 | F3 = 36768 | F4 = 0 |
| | 00380 | 1/ 3/80 | F1 = | 0 | F2 = 74675 | F3 = 47210 | F4 = 0 |
| | 00480 | 1/ 4/80 | F1 = | 0 | F2 = 12994 | F3 = 0 | F4 = 0 |
| | 00580 | 1/ 5/80 | F1 = | 0 | F2 = 51658 | F3 = 0 | F4 = 0 |
| | 00680 | 1/ 6/80 | F1 = | 0 | F2 = 49184 | F3 = 0 | F4 = 0 |
| | 00780 | 1/ 7/80 | F1 = | 0 | F2 = 54952 | F3 = 0 | F4 = 0 |
| | 00880 | 1/ 8/80 | F1 = | 0 | F2 = 51984 | F3 = 0 | F4 = 0 |
| | 00980 | 1/ 9/80 | F1 = | 0 | F2 = 50395 | F3 = 0 | F4 = 0 |
| Z001 | 01080 | 1/10/80 | F1 = | 0 | F2 = 47010 | F3 = 0 | F4 = 0 |
| | 01180 | 1/11/80 | F1 = | 0 | F2 = 49087 | F3 = 0 | F4 = 0 |
| | 01280 | 1/12/80 | F1 = | 0 | F2 = 48946 | F3 = 0 | F4 = 0 |
| | 01380 | 1/13/80 | F1 = | 0 | F2 = 50158 | F3 = 0 | F4 = 0 |
| | 01480 | 1/14/80 | F1 = | 0 | F2 = 37769 | F3 = 0 | F4 = 0 |
| | 01780 | 1/17/80 | F1 = | 0 | F2 = 10742 | F3 = 0 | F4 = 0 |
| | 01880 | 1/18/80 | F1 = | 0 | F2 = 35568 | F3 = 0 | F4 = 0 |
| Z002 | 02280 | 1/22/80 | F1 = | 0 | F2 = 17879 | F3 = 0 | F4 = 0 |
| | 02380 | 1/23/80 | F1 = | 0 | F2 = 50022 | F3 = 0 | F4 = 0 |
| | 02480 | 1/24/80 | F1 = | 0 | F2 = 50561 | F3 = 0 | F4 = 0 |
| | 02580 | 1/25/80 | F1 = | 0 | F2 = 48155 | F3 = 0 | F4 = 0 |
| | 02680 | 1/26/80 | F1 = | 0 | F2 = 39792 | F3 = 0 | F4 = 0 |
| | 02780 | 1/27/80 | F1 = | 0 | F2 = 36326 | F3 = 0 | F4 = 0 |
| | 02880 | 1/28/80 | F1 = | 0 | F2 = 32443 | F3 = 0 | F4 = 0 |
| | 02980 | 1/29/80 | F1 = | 0 | F2 = 71940 | F3 = 0 | F4 = 0 |
| Z003 | 03080 | 1/30/80 | F1 = | 0 | F2 = 42082 | F3 = 0 | F4 = 0 |
| | 03180 | 1/31/80 | F1 = | 0 | F2 = 46699 | F3 = 0 | F4 = 0 |

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|-------|---------|--------|------------|-----------|-----------|
| 03280 | 2/ 1/80 | F1 = 0 | F2 = 43090 | F3 = 0 | F4 = 0 |
| 03380 | 2/ 2/80 | F1 = 0 | F2 = 32232 | F3 = 0 | F4 = 0 |
| 03580 | 2/ 4/80 | F1 = 0 | F2 = 0 | F3 = 3197 | F4 = 0 |
| 03680 | 2/ 5/80 | F1 = 0 | F2 = 6718 | F3 = 6917 | F4 = 664 |
| 03780 | 2/ 6/80 | F1 = 0 | F2 = 21318 | F3 = 0 | F4 = 3164 |
| 03880 | 2/ 7/80 | F1 = 0 | F2 = 19511 | F3 = 0 | F4 = 0 |
| 03980 | 2/ 8/80 | F1 = 0 | F2 = 2170 | F3 = 0 | F4 = 0 |
| Z004 | 04080 | F1 = 0 | F2 = 44485 | F3 = 0 | F4 = 0 |
| | 04180 | F1 = 0 | F2 = 15262 | F3 = 0 | F4 = 0 |
| | 04280 | F1 = 0 | F2 = 52859 | F3 = 0 | F4 = 0 |
| | 04380 | F1 = 0 | F2 = 35944 | F3 = 0 | F4 = 0 |
| | 04480 | F1 = 0 | F2 = 5501 | F3 = 0 | F4 = 0 |
| | 04580 | F1 = 0 | F2 = 40891 | F3 = 0 | F4 = 0 |
| | 04680 | F1 = 0 | F2 = 5598 | F3 = 0 | F4 = 0 |
| | 04780 | F1 = 0 | F2 = 36587 | F3 = 0 | F4 = 0 |