#524

RAE-B

RYLE-VONBERG 24-HOUR DATA

73-039A-01B

Table of Contents

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1. INTRODUCTION:

The documentation for this data set was originally on paper, kept in NSSDC's Data Set Catalogs (DSCs). The paper documentation in the Data Set Catalogs have been made into digital images, and then collected into a single PDF file for each Data Set Catalog. The inventory information in these DSCs is current as of July 1, 2004. This inventory information is now no longer maintained in the DSCs, but is now managed in the inventory part of the NSSDC information system. The information existing in the DSCs is now not needed for locating the data files, but we did not remove that inventory information.

The offline tape datasets have now been migrated from the original magnetic tape to Archival Information Packages (AIP's).

A prior restoration may have been done on data sets, if a requestor of this data set has questions; they should send an inquiry to the request office to see if additional information exists.

2. ERRATA/CHANGE LOG:

NOTE: Changes are made in a text box, and will show up that way when displayed on screen with a PDF reader.

When printing, special settings may be required to make the text box appear on the printed output.

Version	Date	Person	Page	Description of Change
01				
02				

3 LINKS TO RELEVANT INFORMATION IN THE ONLINE NSSDC INFORMATION SYSTEM:

http://nssdc.gsfc.nasa.gov/nmc/

[NOTE: This link will take you to the main page of the NSSDC Master Catalog. There you will be able to perform searches to find additional information]

4. CATALOG MATERIALS:

a. Associated Documents — To find associated documents you will need to know the document ID number and then click here.
http://nssdcftp.gsfc.nasa.gov/miscellaneous/documents/

b. Core Catalog Materials

RAE-B

RYLE-VONBERG 24-HOUR DATA

73-039A-01B PSFP-00075

THIS DATA SET HAS BEEN RESTORED. ORIGINALLY IT CONTAINED 11 9-TRACK, 1600 BPI TAPES WRITTEN IN BINARY WITH AN IBM STANDARD LABEL. THERE ARE TWO RESTORED TAPES, THESE TAPES WERE STACKED WITHOUT THE STANDARD LABEL. THE DR TAPES ARE 3480 CARTRIDGES AND THE DS TAPES ARE 9-TRACK, 6250 BPI. THE ORIGINAL TAPES WERE CREATED ON AN IBM 360 COMPUTER AND THEY WERE RESTORED ON THE MRS SYSTEM. THE DR AND DS NUMBERS ALONG WITH THE CORRESPONDING D NUMBERS AND THE TIME SPANS ARE AS FOLLOWS:

DR#	DS#	D#	FILES	TIME SPAN
DR004293	DS004293	D047295	1-15	07/12/73 - 09/09/73
		D047296	16-30	09/10/73 - 11/09/73
		D047297	31-44	11/09/73 - 01/03/74
		D047298	45-59	01/04/74 - 03/04/74
		D047299	60-74	05/04/74 - 07/02/74
		D047300	75-89	07/03/74 - 08/31/74
DR004294	DS004294	D047301	1-15	09/01/74 - 10/30/74
		D047302	16-30	10/31/74 - 12/29/74
		D047303	31-45	12/30/74 - 02/28/75
		D047304	46-60	02/28/75 - 04/29/75
		D047305	61-75	04/29/75 - 06/28/75

REQ. AGENT	RAND NO.	ACQ. AGENT
GLS	V0111	JIV

RAE-B

RYLE-VONBERG 24-HOUR DATA

73-039A-01B

This data set catalog consists of 11 magnetic tapes. Each tape contains 15 files of data, with each file containing 4 days of data. The files are in chronological order. These tapes were created on the 360 computer. These tapes are 1600 BPI, 9-track, IBM standard tapes. The following lists the D numbers, RA numbers, files and the time span for each tape.

D#	RA#	FILES	TIME SPAN
D-47295	RA1370	45	07/12/73 - 09/09/73
D-47296	RA1371	45	09/10/73 - 11/09/73
D-47297	RA1372	42	11/09/73 - 01/01/74
D-47298	RA1373	45	01/04/74 - 03/04/74
D-47299	RA1375	45	05/04/74 - 07/02/74
D-47300	RA1376	45	07/03/74 - 08/31/74
D-47301	RA1377	45	09/01/74 - 10/30/74
D-47302	RA1378	45	10/31/74 - 12/29/74
D-47303	RA1379	45	12/30/74 - 02/28/74
D-47304	RA1380	45	02/28/75 - 04/29/75
D-47305	RA1381	45	04/29/75 - 06/28/75

B 24274-000A

RAE-2 EXPERIMENT DESCRIPTION

The Radio-Astronomy-Explorer-2 satellite (Explorer-49) was placed in an 1100 km, circular lunar orbit on 15 June 1973. The RAE-2 was instrumented with electric antennas and radio receivers designed to provide sensitive observations of nonthermal radio emissions from the sun, the planets, and the Milky Way at frequencies between 25 kHz and 13 MHz. This document describes the basic data base compiled from the RAE-2 radio receiver experiments. A detailed discussion of the objectives and instrumentation of RAE-2 is given in "Scientific Instrumentation of the Radio-Astronomy-Explorer-2 Satellite" by J.K. Alexander, M.L. Kaiser, J.C. Novaco, F.R. Grena, and R.R. Weber which was published as Goddard Space Flight Center Report X-693-75-40, Feb. 1975 (attachment 1) and which appeared in slightly condensed form under the same title in Astronomy and Astrophysics, vol. 40, pp. 365-371 (1975). Additional information can be obtained in papers listed in the Radio Astronomy Explorer Program Bibliography appended to this document (attachment 2). A list of important RAE-2 operations dates is given in Table 1, and a list of some pertinent experiment parameters is given in Table 2 and shown in Figure 1.

Table 1. Major RAE-2 Event Dates

Launch	10 June 1973
Lunar orbit injection	15 June 1973
Final orbit trim	9 July 1973
V-antenna extension to 183m; experiment turn-on	12 July 1973
First lunar shadow period	29 July-26 Oct. 1973
Upper V-antenna extension to 200 m . .	8 Nov. 1973
Upper V-antenna extension to 229 m . .	14 Nov. 1973
Second lunar shadow period	3 Jan-22 Mar. 1973
Third lunar shadow period	10 June-28 Aug. 1974
One lower V-antenna boom extended to 229 m	11 Oct. 1974
Other lower V-antenna boom extended to 229 m.	6 Nov. 1974
Fourth lunar shadow period	17 Nov. 1974-1 Feb. 1975
Fifth lunar shadow period	21 Apr.-9 Jul. 1975
Begin "new moon intensive" 50% data coverage	1 July 1975
Resume full-time data coverage	24 Dec. 1975
Return to 50% coverage during selected periods	17 Apr. 1976
Resume full-time coverage	19 Oct. 1976

Table 2. Salient RAE-2 Experiment Characteristics

ORBIT	
Lunar altitude	1058 x 1070 km
Inclination to lunar equator	59°
Period	222 min
BURST RECEIVERS	
Frequency range	0.025-13.1 MHz
Number of channels	32
Sample rate	1 sample/7.68 sec at each frequency
Bandwidth	20 kHz
Time constant	6 ms
Dynamic range	> 50 dB
Calibration accuracy (relative)	±0.5 dB rms
V-ANTENNAS	
Full length	229 m
Apex angle	approx. 35°

Table 2 (continued)

RYLE-VONBERG RECEIVERS

Frequency range	0.450 - 9.18 MHz
Number of channels	9
Sample rate	
Coarse	4 samples/7.68 sec at one frequency
Fine	1 sample/7.68 sec at one frequency
Cycle Time	138 seconds
Bandwidth	40 kHz
Time Constant	
Coarse	0.1 sec
Fine	0.5 sec
Dynamic range	60 db
Calibration accuracy (relative)	$\pm$ 3%

Burst Receivers

The RAE-2 burst receivers were 32-channel, stepped-frequency receivers which obtained one sample at each frequency every 7.68 sec. One receiver (BR-1) was connected to the upper V-antenna and one receiver (BR-2) was connected to the lower V-antenna. As shown in the accompanying block diagram (Figure 2) the RF voltage at the feed point of each half of the V-antenna was sampled by a wide-band, high-impedance pre-amplifier, and the pre-amplifier outputs were combined in a balun transformer and fed to the burst receiver. Each burst receiver was comprised of a pair of redundant IF amplifiers and detectors which shared a common set of crystal-controlled local oscillators and mixers. Only one IF strip was powered on at a given time; the other was used as a back-up system. Low-pass filters at the input of the burst receiver prevented strong signals at the 21.4 MHz intermediate frequency from entering the IF strip. Each receiver had a crystal-controlled IF bandwidth of 20 kHz and a post-detection integration time constant of 6 msec. A thermistor located in each burst receiver provided a measurement of the ambient temperature of the receiver, and this information was included in the housekeeping data telemetered every 19.7 min. Also, the normal antenna signal measurement sequence was interrupted for 1.28 min every 19.7 min, and calibration noise source signals were injected into each burst receiver to provide a check of their long term gain stability. The center frequencies for each burst receiver channel are listed in Table 3.

Table 3. RAE-2 Burst Receiver Frequencies

Ch.#	Freq.(kHz)	Ch.#	Freq.(kHz)	Ch.#	Freq.(kHz)	Ch.#	Freq.(kHz)
1	25	9	130	17	475	25	2200
2	35	10	155	18	600	26	2800
3	44	11	185	19	737	27	3930
4	55	12	210	20	870	28	4700
5	67	13	250	21	1030	29	6550
6	83	14	292	22	1270	30	9180
7	96	15	360	23	1450	31	11800
8	110	16	425	24	1850	32	13100

The total dynamic range of the burst receivers was approximately 60 dB and was divided into two 30-dB ranges by logic circuitry in the detector electronics. The least significant bit of each 8-bit telemetry word was used to provide a range flag. The limit of the input signal level resolution due to telemetry quantization step size was about 0.3 dB.

Saturation level signals at the pre-amplifier input often resulted in the generation of intermodulation products in the RF amplifiers which then appeared as wide-band signals in the telemetered data. This problem was most acute when intense kilometer wavelength emissions from the terrestrial magnetosphere were observed at frequencies in the 200-300 kHz range. BR-1 was less susceptible to intermodulation problems than BR-2 by 6 to 10 dB. An example of an event with significant intermodulation interference artifacts is shown in Figure 3.

Due to a failure in the local oscillator circuitry in BR-1, channels 4(55 kHz) and 12 (210 kHz) did not provide useable data.

During periods when a portion of each orbit was in the lunar shadow, cyclic variations in thermal gradients across the V-antenna booms resulted in scissor-mode oscillations of the booms which did not occur when the spacecraft was in 100% sunlight. One consequence of this boom motion was a variation in antenna impedance that sometimes resulted in significant fluctuations in the apparent signal level - especially at frequencies near half- and full-wave resonance (i.e. $\sim$ 737 and 1310 kHz.) This effect had a period of approximately 50 min (the scissor-mode period) and was most pronounced on the upper V-antenna during the first and fifth lunar shadow period (see Table 1) and on the lower V-antenna during the second and third lunar shadow periods.

Daily dynamic spectral plots were generated using BR-2 data in the following fashion. For every 10-minute interval of data, signal intensity distributions, N(I), were calculated at each frequency by sorting the data in 1-dB bins. Then the values of the mean, minimum, and maximum signal levels as well as the mode (most common value) of the distribution were determined for each 10-min interval at each frequency. These data were used to generate four 24-hr dynamic spectral displays which showed the variation of the average, minimum, maximum and mode of the received noise as a function of frequency and time with 10-min resolution. The intensity scale was plotted in increments of 1 dB with respect to the average background level at each frequency determined from studies of the long-term baseline level. The display format is illustrated and explained in Figures 3 and 4.

The dynamic spectral plots discussed above were generated from data contained on the RAE-2 Burst Receiver Ten Minute Summary Tapes. The contents and format of those tapes are described in Attachment 3.

Ryle-Vonberg Receivers

The RAE-2 Ryle-Vonberg receivers are designed to provide measurements which are relatively insensitive to gain and bandwidth changes. They operate at nine frequencies from 0.45 to 9.18 MHz. There are two recievers - RV-1 connected to the upper V and RV-2 connected to the lower V. The radiometers have an effective bandwidth of 40 kHz and a post-detection time constant of 0.1 second. A coarse output channel is obtained from the integrated servo-loop error signal, and a fine output channel is obtained from the noise source output required to match the antenna signal. (See Figure 5 for a block diagram of the Ryle-Vonberg receivers.) The time constant for the fine channel is 0.5 second. A thermistor located in the receiver measures the ambient temperature which is telemetered every 19.7 minutes in the housekeeping data. The center frequencies for the Ryle-Vonberg receivers are listed in Table 4.

Each frequency is selected for 15.4 seconds before stepping to the next. During this time, eight coarse and two fine samples are taken. Of the eight coarse samples, the first is not reliable since not enough time has elapsed for the reciever to stabilize since the frequency switch was made.

The data from the Ryle-Vonberg receivers are written on a tape containing 15 files with each file representing 4 days of data produced from the 24-hr tapes. The format of the tapes is described in Attachment 4.

Table 4. Ryle-Vonberg Receiver Frequencies

Channel Number	Frequency (MHz)
1	0.45
2	0.70
3	0.90
4	1.31
5	2.20
6	3.93
7	4.70
8	6.55
9	9.18

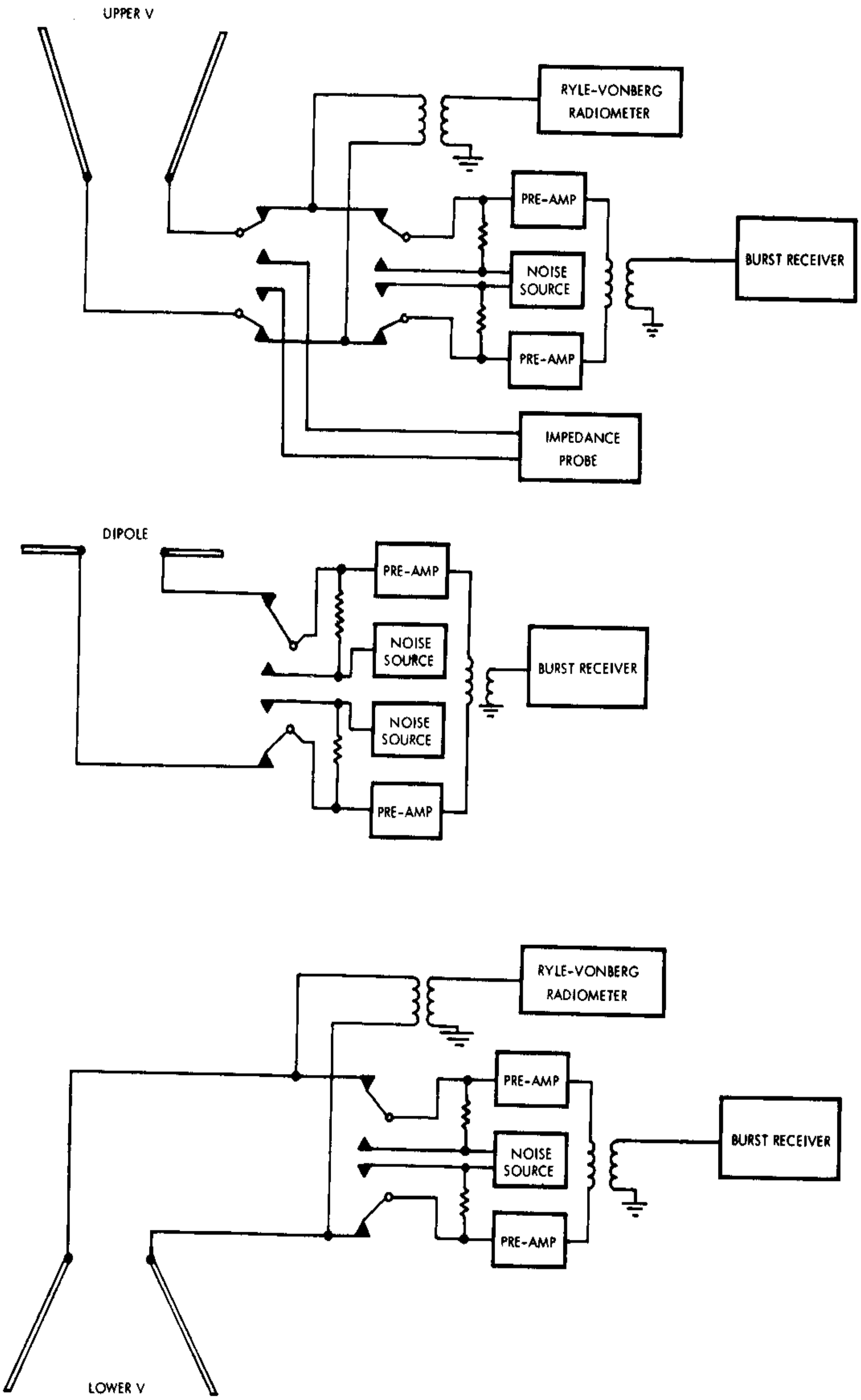

Fig. 1. Block diagram of RAE-2 experiment instrumentation

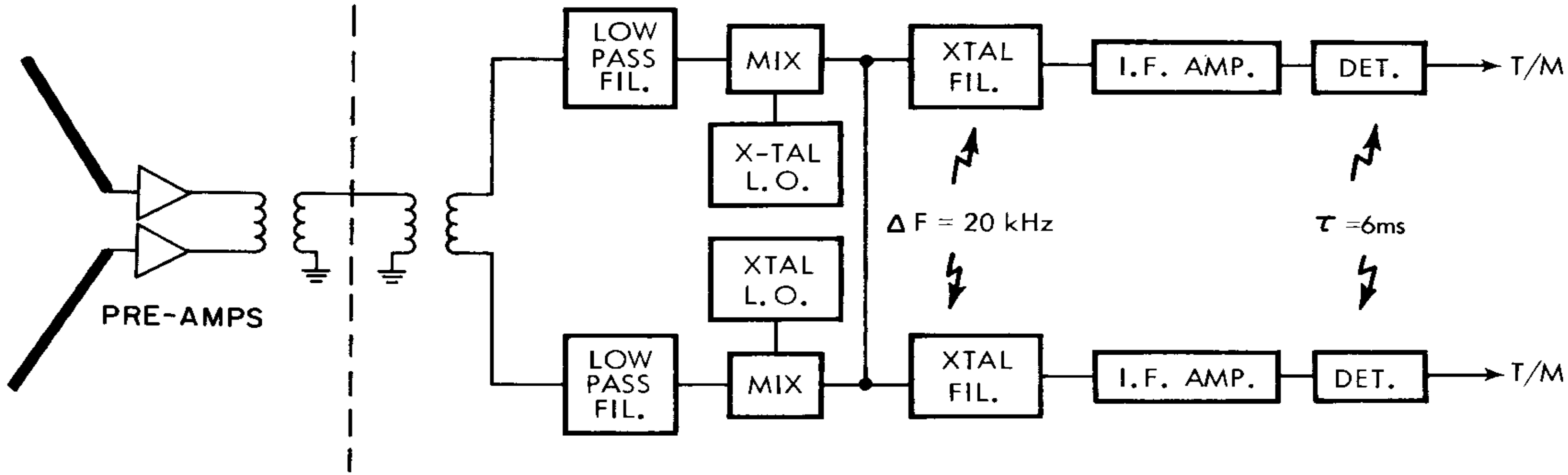

Fig. 2 Block diagram of the RAE-2 V-antenna burst receiver.

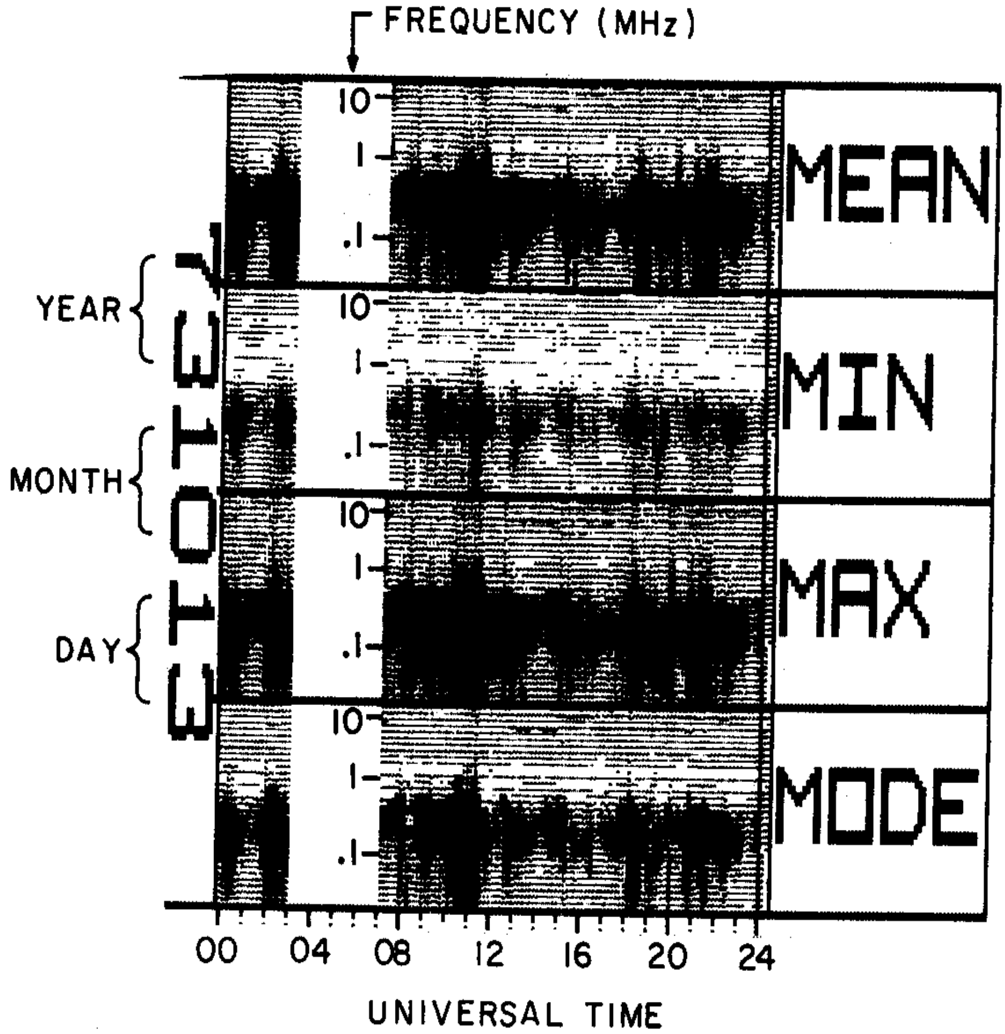

Fig. 3 Twenty-four-hour dynamic spectrum of BR-2 measurements illustrating receiver intermodulation effects due to intense terrestrial noise levels at frequencies near 0.3 MHz. The vertical "stripes" which appear to indicate strong wide-band signal levels (especially near 02-03 hr., 10-12 hr., 18-19 hr., and 21-22 hr. U.T.) are due to intermodulation effects in the pre-amplifiers.

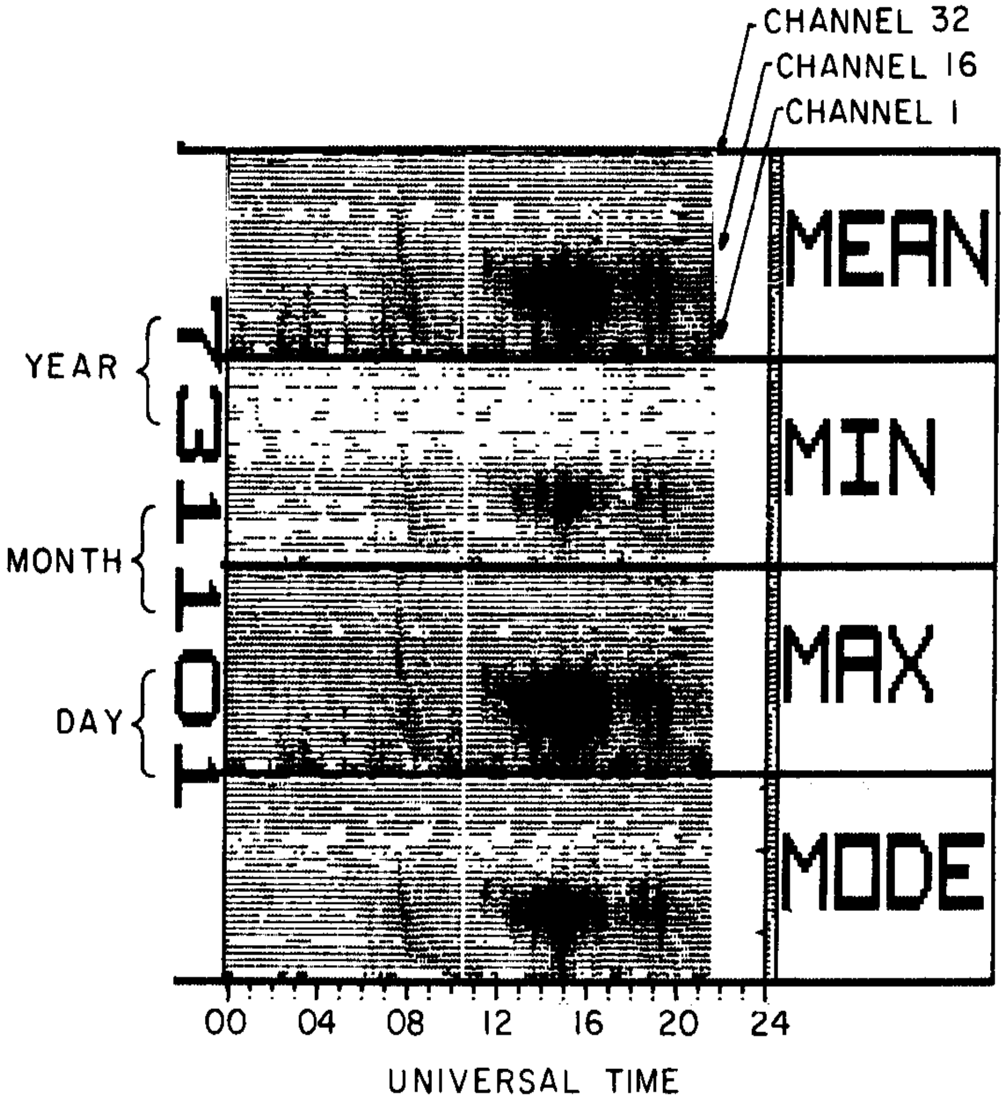

Fig. 4 Example of the 24-hr. dynamic spectral plots generated from the burst receiver ten-minute summary data tapes. Increasing darkness indicates increasing signal intensity. Note (1) some sporadic VLF noise bursts from the solar wind at frequencies below 100 kHz at about 02-04 hr. U.T., (2) a type III solar radio burst at about 08-09 hr. U.T., and (3) a terrestrial kilometer wavelength radio storm at about 13-17 hr. U.T.

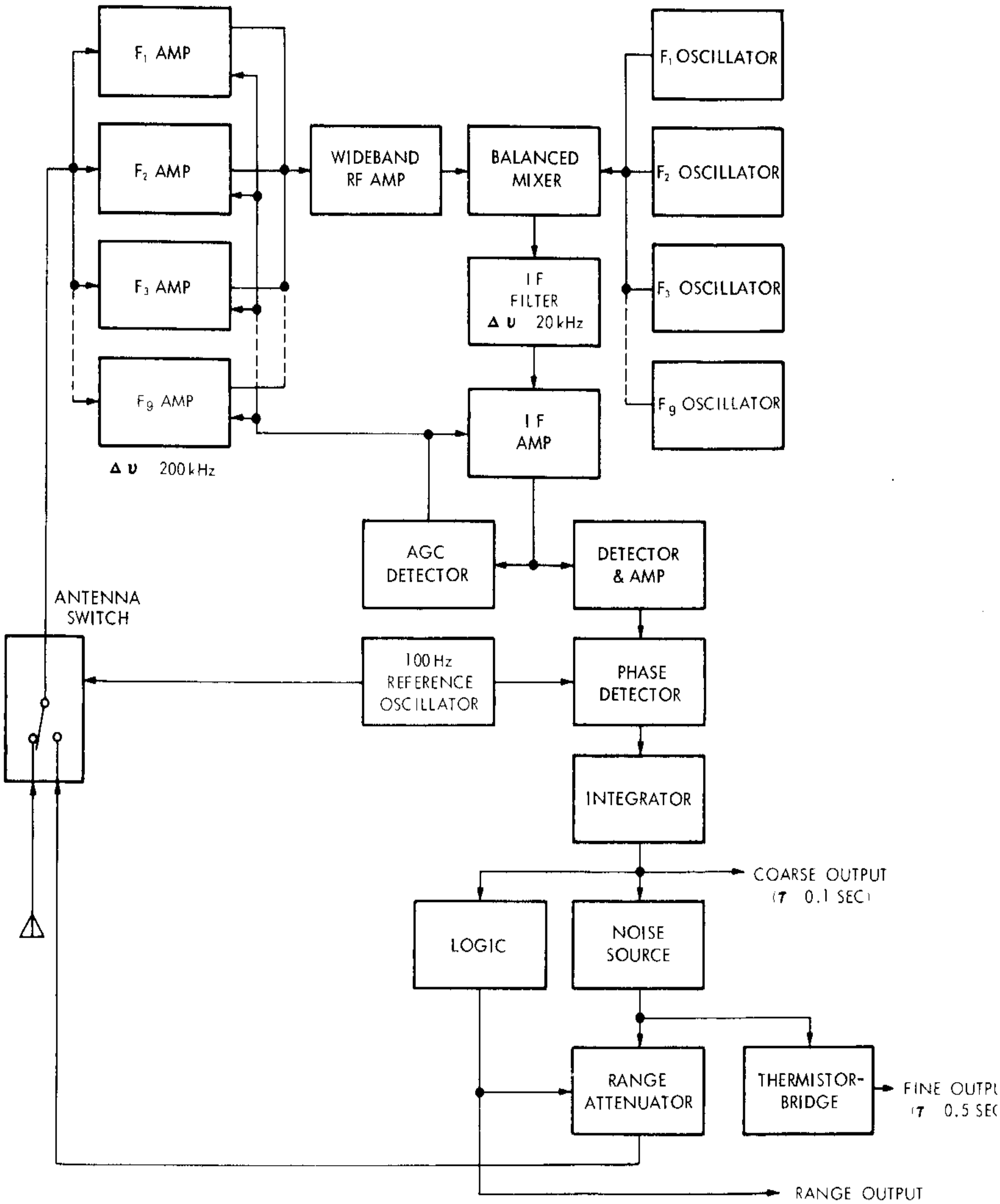

Fig. 5. Block diagram of RAE-2 Ryle-Vonberg receiver

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ATTACHMENT 3

TAPE FORMAT FOR THE RAE-2 BURST RECEIVER TEN MINUTE SUMMARY TAPES

EACH LOGICAL RECORD CONTAINS A SUMMARY OF TEN MINUTES OF DATA FROM THE BR-1 AND 2 RECEIVERS. THE TEN MINUTE INTERVALS ARE DEFINED TO START AT PRECISELY 0 HR ON EACH DAY. THE LOGICAL RECORD LENGTH IS 544 8-BIT BYTES + A 4 BYTE LOGICAL RECORD CONTROL WORD. THE PHYSICAL RECORDS ARE 32336 BYTES (=548*59+4). THE TAPES ARE 9-TRACK 1600 BPI. EACH TAPE CONTAINS TWO CALENDAR YEARS OF DATA. THE INDIVIDUAL QUANTITIES IN EACH RECORD ARE

FORTRAN WORD #	TYPE	LENGTH BYTES	DESCRIPTION
1	I	4	DATE IN YYMMDD FORM (E.G. MAY 15,1974=740515)
2	I	4	UT IN ELAPSED SECONDS FROM 0HR AT THE START OF TEN MINUTE INTERVAL
3,4,5	R	4	LUNICENTERED X,Y,Z OF SPACECRAFT IN KM AT THE ABOVE TIME. THE X AXIS POINTS TOWARD 1ST POINT OF ARIES AND Z IS PARALLEL TO THE EARTH'S SPIN AXIS--THE SYSTEM IS PARALLEL TO GEOCENTRIC EQUATORIAL SYSTEM BUT TRANSPOSED TO THE MOON.
6,7,8	R	4	LUNICENTERED X,Y,Z OF THE EARTH IN UNIT VECTOR FORM AT THE ABOVE TIME

THE FOLLOWING SET OF 8 BYTES IS REPEATED FOR EACH FREQUENCY(IN THE SAME ORDER AS TABLE 3) FOR BOTH RECEIVERS(8*32*2=512 BYTES=WORD NOS. 9-136). THE 2% VALUES AND THE MODES WERE DETERMINED BY FORMING HISTOGRAMS (FOR EACH FREQUENCY AND RECEIVER) IN 1 DB INCREMENTS FROM THE INDIVIDUAL SAMPLES TAKEN DURING THE 10 MINUTE INTERVAL. THE HISTOGRAMS WERE THEN SCANNED TO FIND THE LOWEST BIN CONTAINING AT LEAST 2% OF THE TOTAL NUMBER OF SAMPLES, THE HIGHEST BIN CONTAINING 2% OF THE TOTAL, AND THE BIN CONTAINING THE MOST SAMPLES (MODE). IN SOME CASES, NO BIN CONTAINED AT LEAST 2% OF THE VALUES, SO A ZERO WAS WRITTEN ON THE TAPE.

TYPE	LENGTH BYTES	DESCRIPTION
I	1	NUMBER OF NON-ZERO SAMPLES DURING THIS TEN MINUTE INTERVAL FOR THIS FREQUENCY AND RCVR
I	1	2% MINIMUM IN DB ABOVE 1 DEGREE KELVIN
I	1	2% MAXIMUM IN DB ABOVE 1 DEGREE KELVIN
I	1	MODE (MOST COMMONLY OCCURRING VALUE) IN DB ABOVE 1 DEGREE KELVIN
I	2	100*ALOG10($\sum T_i$) WHERE T_i IS A SAMPLE
I	2	100*ALOG10($\sum T_i^2$)

THIS TAPE COULD BE READ AS FOLLOWS (IN IBM 360 FORTRAN IV):

```
LOGICAL*1 NUM(32,2),MIN(32,2),MAX(32,2),MODE(32,2)
INTEGER*2 SUMT(32,2),SUMTSQ(32,2)
READ(IUNIT) IYMD,ISEC,XM,YM,ZM,XE,YE,ZE,
```

```
     1   ((NUM(I,J),MIN(I,J),MAX(I,J),MODE(I,J),SUMT(I,J),SUMTSQ(I,J),
     2   I=1,32),J=1,2)
.
HOWEVER, A CHEAPER (IN CPU $) METHOD USING EQUIVALENCE IS:
.
      INTEGER*4 A(136)
      INTEGER*2 SUMT(4,32,2),SUMTSQ(4,32,2)
      LOGICAL*1 NMMM(8,32,2)
      EQUIVALENCE (A(1),IYMD),(A(2),ISEC),(A(3),XM),(A(4),YM),
     1   (A(5),ZM),(A(6),XE),(A(7),YE),(A(8),ZE),
     2   (A(9),NMMM(1),SUMT(1),SUMTSQ(1))
      READ(IUNIT) A
.
FOR NMMM USE ONLY ROWS 1,2,3,4 FOR NUM,MIN,MAX,MODE
FOR SUMT USE ONLY ROW 3
FOR SUMTSQ USE ONLY ROW 4
%
```

? RA 1370 -
RA 1381

ATTACHMENT 4

Tape Format for the RAE-2 Ryle-Vonberg 24-Hr tapes

Each tape contains 15 files of data, with each file containing 4 days of data. The files are in chronological order. The tapes are ~~1600~~ 6250 BPI, 9-track, ~~IBM standard label tapes~~. The logical record length is 908 bytes, consisting of a 4 byte logical record control word and 904 data bytes. The physical record length is 31784 bytes long, consisting of a control word and 35 logical records.

Each logical record is formulated as follows:

Word #	Tape	Length (Bytes)	Description
0	I	4	logical record control word (to be ignored)
1	I	4	Date, YYMMDD
2	I	4	Milliseconds of day
3	I	4	Frequency where 9 = 9.18 MHz and 1 = 0.45 MHz, etc.
4,5,6	R	4	X, Y, z of spacecraft in km. X-axis points toward the vernal equinox, the z axis is parallel to the earth's spin axis
6,7,8	R	4	X, Y, z of earth's unit vector in lunicentered form
10, 11	R	4	Right ascension and declination (1950.0) of the upper V.
12-18	R	4	Seven RV-1 coarse samples
19-20	R	4	Two RV-1 fine samples
21-27	R	4	Seven RV-2 coarse samples
28-29	R	4	Two RV-2 fine samples
30-225	Repeat of words 2-29 eight times for the remaining sets of this frequency in this sequence		
226	I	4	RV ambient temperature

In IBM 360 Fortran IV, the tape could be read as follows:

```
REAL*4    A(226), RV(28,8)
INTEGER *4    IRV(28, 8)
EQUIVALENCE   (A(1), IYMD), (A(2), RV(1,1), IRV(1,1))
READ (IUNIT) A
```

DRDS004293

HEX DUMP OF AL1093

FILE 1 RECORD 1 31784 BYTES 730712

(0)	7C200000	038C0000	00082658	04863804	00000006	C31E63A9	4389CAC2	C3683CCD	40247C61	40E5D0BA
(40)	406AB8F1	41623A42	C220FCD4	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(80)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(120)	00000000	048853F9	00000006	C32980B0	43888F9A	C365FBC4	40246708	40E5D45B	406AB86C	4166E3F6
(160)	C22079E3	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(200)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	048A6FED
(240)	00040006	C334715E	438EC309	C3634E21	402451AF	40E5D7F9	406AB7E7	416B7D3A	C21FCC64	45EF0E94
(280)	459E0C35	45DBD4C2	45B9E483	45CA267A	45CA267A	4616B8DE	4614F7F3	461790A5	00000000	00000000
(320)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	048C8BE1	00000006	C33F2A69
(360)	438456EA	C36036A7	40243C57	40E5DB97	406AB761	4170026C	C21EF5E9	457C770F	4591DC94	459E0C35
(400)	45B9E483	45B9E483	45CA267A	45B9E483	45FA939C	45C950EC	00000000	00000000	00000000	00000000
(440)	00000000	00000000	00000000	00000000	00000000	048EA7D6	00000006	C3499C5A	438175B7	C35CB2D0
(480)	402426FE	40E5DF31	405AB6DA	41746F24	C21DF628	46103F75	45CA267A	45DBD4C2	463925DA	46103F75
(520)	46103F75	4611AB38	461EA4C8	461DC321	464E29E0	4622BE5D	463C2B0C	46705E8F	465C1E75	46325DDB
(560)	46479D78	4642DD76	464A11A3	0490C3CA	00000006	C353BF97	437DFA94	C358CC35	402411A5	40E5E2CB
(600)	406AB652	4178C257	C21CD183	46103F75	45CA267A	4614E508	46103F75	45B9E483	461336DA	45EF0E94
(640)	46121F18	461596EB	46389240	46159F65	464AD157	462A9717	463C2B0C	464AD157	462F9E85	46396E4A
(680)	4637615D	0492DF8E	00000006	C35D89BC	4379F939	C35486F5	4023FC4B	40E5E663	406AB5C9	417CFA96
(720)	C21B8A3D	45B9E483	459E0C35	4611AB38	45DBD4C2	45DBD4C2	45AB4022	45CA267A	45FE4286	45DEF789
(760)	46159F65	4618C8B0	46632999	464E29E0	46554F8E	4622BE5D	463C2B0C	46396E4A	46396E4A	0494FBB2
(800)	00040006	C366EC45	43757080	C34FE400	4023E6F0	40E5E9F9	406AB540	418115F1	C21A216F	45CA267A
(840)	45AB4022	45AB4022	45AB4022	45AB4022	45AB4022	45AB4022	45CF4735	45CC466C	462E4D67	46153483
(880)	46157B79	46120B65	461D8914	4613014B	46257239	461A93EA	4620A9DE	4121EB85	038C0000	00082658
(920)	04887A03	00000005	C31FA13A	4389AD45	C36800D7	40247A02	40E5D121	406AB8E2	4162BF6E	C220EFEB
(960)	00000000	00000000	00000000	00000000	00000000	00000000	46166095	00000000	00000000	00000000
(1000)	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000	04888FF7	00000005
(1040)	C32ABA57	438863C7	C365850D	402464A9	40E5D4C2	406AB85E	416767AC	C22068BE	00000000	00000000
(1080)	00000000	00000000	431C2762	46219931	46276EF5	00000000	461D43C3	00000000	00000000	00000000
(1120)	00000000	00000000	00000000	00000000	00000000	00000000	048AABEC	00000005	C335A624	43868904
(1160)	C362FCDF	40244F50	40E5D860	406AB7D9	416BFF27	C21FB723	461FB21A	462297A2	462297A2	462297A2
(1200)	46219931	4624AB38	462297A2	46239C95	46239C95	00000000	00000000	00000000	00000000	00000000
(1240)	00000000	00000000	00000000	00000000	048CC7E0	00000005	C3405610	43841817	C35FD62E	402439F8
(1280)	40E5DBFD	406AB752	41708123	C21EDAD1	46219931	4625E8A3	462297A2	4624AB38	46239D8A	462297A2
(1320)	462297A2	46239C95	4622839B	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1360)	00000000	00000000	048EE3D4	00000005	C34AC09A	4381191D	C35C486C	4024249F	40E5DF97	406AB6CB
(1400)	4174EB63	C21DD755	46239D8A	46291AD6	46276EF5	46239D8A	46291AD6	46291AD6	462AD8D9	4628E74A
(1440)	4627D49F	4635DE55	463BC75A	4635DE55	463BC75A	4635DE55	4638BF2A	4638BF2A	4636AB85	4636AB85
(1480)	0490FFC9	00000005	C354D89A	437D909E	C3585853	40240F45	40E5E331	406AB643	41793C02	C21CAF2E
(1520)	462E8E54	46276EF5	462CA9C4	462CA9C4	4624AB38	462CA9C4	462AD8D9	462A0171	462A0171	4642ECD8
(1560)	46472BD8	463BC75A	463F1A15	463BC75A	4642ECD8	46472BD8	463E1616	463FB3E2	04931BBD	00000005
(1600)	C35E8977	43797E32	C3540726	4023F9EC	40E5E6C9	406AB5BA	417D70B2	C21B6398	462AD8D9	462CA9C4
(1640)	462E8E54	46276EF5	46276EF5	462AD8D9	46291AD6	462A0171	462A0171	46472BD8	46472BD8	46472BD8
(1680)	464BAFCE	465883A2	4651A8E0	4642ECD8	464160C7	4644DCBC	049537B1	00000005	C367EFBD	4374E6E7
(1720)	C34F5A12	4023E491	40E5EA5F	406AB531	418188CD	C219F738	46276EF5	46291AD6	462CA9C4	4625E8A3
(1760)	462CA9C4	462CA9C4	46276EF5	467B2329	4628E74A	465883A2	464BAFCE	4651A8E0	464BAFCE	46472BD8
(1800)	464BAFCE	46472BD8	4646AC75	4646AC75	4121EB85	038C0000	00082658	0486B002	00000004	C320DECA
(1840)	43888FC8	C367C4E2	402477A2	40E5D189	406AB8D4	4163449C	C220E301	00000000	00000000	00000000
(1880)	00000000	4633C81D	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(1920)	00000000	00000000	00000000	00000000	00000000	0488CBF6	00000004	C32BF402	438837F4	C3656E55
(1960)	4024624A	40E5D529	406AB94F	4167E866	C2205798	46131A2A	46131A2A	4611C82D	461427D3	4612C362
(2000)	461427D3	46126E21	4612E874	4613DC24	00000000	00000000	00000000	00000000	00000000	00000000
(2040)	00000000	00000000	00000000	048AE7EA	00000004	C336D8A8	43864969	C362A782	40244CF1	40E5D8C7
(2080)	406AB7CA	416C8043	C21FA04B	4612C362	46121A6C	46131A2A	4613CC6D	4615437F	461427D3	4613CC6D
(2120)	4613DC24	4613DC24	00000000	00000000	00000000	00000000	00000000	00000000	00000000	00000000
(2160)	00000000	048D03DF	00000004	C34181A7	4383C922	C35F759C	40243798	40E5DC63	406AB743	4170FFD4
(2200)	C2198FB0	4611C82D	46131A2A	4612C362	46126E21	461427D3	4613727E	4613CC6D	4613DC24	4613DC24
(2240)	00000000	00000000	00000000	00000000	474293D5	4611921F	4611F7AE	463E2C43	46130407	048F1FD3

(31320)	45A[illegible]07A3	4613B3D8	461138 6F	04C66EA0	00000008	C3913136	C3442A16	43463040	4021F210	40E63C3A
(31360)	406AA7D3	41D0269C	421771D7	455A95B1	45533F02	455A95B1	4562687D	457C177C	456ABB6E	45533F02
(31400)	4550D7BD	4550D7BD	45355BE9	00000000	467CD494	46166F79	46195C94	453C6C61	00000000	45ED23E8
(31440)	4740EC13	04C88A94	00000008	C38A913E	C34BDBE5	4348 6F7E	4021DCB0	40E63FA9	406AA737	41D3C3A6
(31480)	42198AB6	454DB6FC	4562687D	455A95B1	45533F02	455A95B1	456ABB6E	455A95B1	4553601F	45521971
(31520)	00000000	00000000	4613D8D1	46118E99	452E4A6B	00000000	4613D8D1	46162724	4615C8FA	04CAA689
(31560)	00000008	C3835CC1	C3533C72	43505DE4	4021C74F	40E64315	406AA69A	41D77D48	421B93C6	456ABB6E
(31600)	455A95B1	456ABB6E	4562687D	455A95B1	4562687D	456ABB6E	45521971	4556132A	46195C94	45F8808C
(31640)	46118E99	47385CFB	00000000	4634E8C1	4530D309	46211C85	4650B871	04CCC27D	00000008	C37B97CE
(31680)	C35A418D	4354F3F4	4021B1EE	40E64680	406AA5FC	41DB573D	421D8A1A	455A95B1	4562687D	4562687D
(31720)	4562687D	00000000	00000000	00000000	455778CD	00000000	45F8808C	45DBD48B	453A5093	00000000
(31760)	47295387	48689F4C	00000000	4656CCCE	00000000	411F0A3D				

HEX DUMP OF AL1093

FILE 1 RECORD 58 10900 BYTES 73/07/15

(0)	2A940000	038C0000	000B265B	0512B1D2	00000009	C39FC2A8	4340EA65	C31EB323	C07AD957	40D14703
(40)	40518799	419E7D31	C1AD7416	45487CE7	453EDF82	4536EE86	452BB1DC	4536EE86	453A8E09	453A8E09
(80)	452D3E65	452AAD0B	46283F9A	46EE591A	00000000	45585D23	457F32C2	4730B770	45585D23	4634DF62
(120)	46819B13	0514CDC6	00000009	C3A3F55A	4338D605	C317CCD8	C07AEC98	40D13E07	405181A4	41A1C1E4
(160)	C18A91F3	452E1449	4536EE86	45306F9B	453A8E09	45306F9B	453EDF82	4536EE86	452BF0F7	452E95B5
(200)	45D3F224	45B01C4F	458563CF	46117D2E	46132FA2	46132FA2	45FF12FF	461181F2	4614D40D	0516E9B9
(240)	00000009	C3A77451	43308342	C310CC5D	C07AFFD8	40D13509	40517BAE	41A4F981	C1870742	4536EE86
(280)	4536EE86	4536EE86	45487CE7	452E1449	452BB1DC	452E1449	4528410E	45297289	45B01C4F	456ED619
(320)	45A08858	45D3F224	455E2CD2	458563CF	45FF12FF	45A3C1E3	45CC44BA	051905AD	00000009	C3AA3A02
(360)	4327FAE9	C29B957A	C07B1318	40D12C09	405175B7	41A82673	C142EED5	453EDF82	4543827E	453A8E09
(400)	4536EE86	453EDF82	4536EE86	45306F9B	45338274	452D3E65	45A08858	45B01C4F	456ED619	458563CF
(440)	45925575	456ED619	456ED619	456C9EFE	45795094	051B21A0	00000009	C3AC4975	431F47D9	C229BF1D
(480)	C0782657	40D12308	40516FC1	41AB4B85	C11E6738	453394E3	453A8E09	45306F9B	45306F9B	453394E3
(520)	45306F9B	453A8E09	452AAD0B	452AAD0B	455721CC	453CCEC2	45925575	455721CC	455117ED	455721CC
(560)	454B7926	455FBB55	455B4D94	051D3D94	00000009	C3AD9F12	431672E7	42484671	C07B3995	40D11A05
(600)	405169C8	41AE6B19	40677AD7	453EDF82	453A8E09	453A8E09	45487CE7	453394E3	4543827E	453394E3
(640)	453245F9	4528410E	455117ED	455117ED	4546350E	455721CC	453CCEC2	453CCEC2	455E2CD2	45442788
(680)	4552EA91	051F5987	00000009	C3AE315F	42D84D0F	42B9F9CD	C07B4CD2	40D11100	405163D0	41B1879E
(720)	412B98E4	4543827E	4543827E	454F4728	4543827E	4558A03E	4543827E	45487CE7	4540B3DB	4540B3DB
(760)	4546350E	4546350E	4546350E	455117ED	4538A54B	455117ED	4531B7D9	45501C89	455FBB55	0521757B
(800)	00000009	C3AE091F	424885B1	4312AE4F	C07B600E	40D107FA	40515DD7	41B4A3DC	4150DB2A	45B06935
(840)	457BC999	457BC999	457BC999	4567C0CF	4558A03E	45709E15	45781D3A	4560A6F9	455117ED	45925575
(880)	45351A81	458563CF	45799781	458563CF	455117ED	454B3A20	45614153	411AE147	038C0000	000B265B
(920)	0512EDD1	00000008	C3A043D2	43400850	C31DF094	C07ADB7B	40D14804	405186EF	419EDAF9	C1A99E0F
(960)	454D5EF9	454305A2	454305A2	453E5697	453E5697	45384F92	45384F92	453308BA	4538FC54	462708CB
(1000)	453371E4	00000000	4610CC9B	46155FFB	45EE49CD	46181C68	45BF1807	45D50CFD	051509C4	00000008
(1040)	C3A462D1	4337EC8B	C31706FB	C07AEEBC	40D13D07	405180FA	41A21E18	C168A7BC	455BDAD6	455BDAD6
(1080)	45460EB6	45460EB6	454D5EF9	455BDAD6	456C43AD	454985F8	454F3FCE	4544B842	00000000	4612F318
(1120)	46181C68	45EE49CD	4610CC9B	4612F318	4611E388	45FCC379	051725B8	00000008	C3A7CA5C	432F926C
(1160)	C31203B2	C07B01FC	40D13409	40517B04	41A55434	C163096A	45384F92	45460EB6	453E5697	454305A2
(1200)	45384F92	45460EB6	45544D83	4539CB51	455402BA	4612F318	45EE49CD	4612F318	00000000	471E9ADA
(1240)	461EADA3	45357896	45348457	462494B6	051941AB	00000008	C3AA7E40	43270592	C28EF660	C07B153B
(1280)	40D12809	4051750D	41A88041	C13EE54E	454D5EF9	453E5697	45384F92	453E5697	453E5697	453E5697
(1320)	45330DEE	4535A202	45385F60	4544B842	00000000	45BB4724	45D33F9B	4612F318	45EE49CD	4612F318
(1360)	45B663E2	46104BE1	051B5D9F	00000008	C3AC7BB3	431E4EBB	C21D152E	C07B287A	40D12208	40516F17
(1400)	41ABA4A9	C11A53E9	454305A2	455BDAD6	45544D83	45C1B916	4574EA4B	4564411A	4564411A	455E686F
(1440)	455069FA	452D819B	00000000	46181C68	461029E5	4580AC48	4582FFF9	49DF6CF7	453C5051	47161D9A
(1480)	051D7992	00000008	C3ADB606	4315759F	4254ED1E	C07B3BB8	40D11904	4051691E	41AEC3A6	40A95ABA

DUMP OF TAPE RA1381

INPUT TAPE RA1381 ON MT4
DATA INPUT H9 NF 45 SR 2 1 1 SR 2 LAST 1 SR 44 1 1 SR 44 LAST 1

D-47385
04/29/75 - 06/28/75

FILE	INPUT RECS.	DATA RECORDS INPUT	MAX. SIZE	READ ERROR SUMMARY PERM	ZERO B	SHORT	UNDEF.	INPUT RETRIES #RECS.	TOTAL#
1	3	3	80	0	0	0	0	0	0

75/04/29

FILE 2 RECORD 1 LENGTH 31784BYTES

(0)	7C2B0000	038C0000	000B735D	028B2110	00000008	435C3CBB	437C92C5	C350A35A	40140679	40EDDB4C
(40)	405C8418	412F2134	C21F4C09	458B3337	45705DF4	45705DF4	45705DF4	456862A0	4581E898	456862A0
(80)	456A0019	4570B689	461D2471	4610C502	46134105	45E9B08B	461961BD	461961BD	46134105	46113B72
(120)	45D67887	028D3D09	00000008	435B79B8	4382AD81	C346F921	4013EEA5	40EDDDBB	405C82FA	41312452
(160)	C21BEFC7	459FD2D0	4581E898	4581E898	458B3337	458B3337	4578F594	459FD2D0	4577D9A6	457D7F9B
(200)	46161B4C	46161B4C	4610C502	461D2471	462175B3	46161B4C	462175B3	461185F1	46121EBD	028F5902
(240)	00000008	435A53E4	43883B13	C33D0233	4013D6D0	40EDE028	405C81DB	413302B4	C2188991	456862A0
(280)	4578F594	45705DF4	458B3337	4581E898	45705DF4	458B3337	4570B689	457EE4B8	461961BD	4610C502
(320)	46161B4C	46161B4C	461961BD	46161B4C	46266ACB	4610AA24	46101DA0	029174FC	00000008	4358CA0A
(360)	438D31E5	C332C792	4013BEFB	40EDE294	405C80B8	4134C176	C2151A92	45705DF4	456862A0	45705DF4
(400)	4578F594	45705DF4	456862A0	45705DF4	45832BFA	45613C88	4610C502	46134105	46134105	46161B4C
(440)	461D2471	46134105	46134105	46113B72	45ED23E8	029390F5	00000008	4356DC73	43918A0B	C32853F1
(480)	4013A726	40EDE4FD	405C7F9B	41366572	C211A3E6	455FA3CF	4581E898	456862A0	456862A0	456862A0
(520)	45705DF4	456862A0	456A0019	4570B689	45E9B08B	4610C502	45E9B08B	46134105	461961BD	4610C502
(560)	4610C502	45E1856D	461383DB	0295ACEE	00000008	4354906E	439543ED	C31DB487	40138F53	40EDE764
(600)	405C7E79	4137F3E4	C1E26CB4	456862A0	45705DF4	456862A0	455FA3CF	456862A0	456862A0	458B3337
(640)	455A93BF	455E842A	46161B4C	461D2471	46161B4C	4610C502	46161B4C	46161B4C	462C1BD7	461185F1
(680)	4610AA24	0297C8E8	00000008	4351E7B4	43985A55	C312F451	4013777E	40EDE9C9	405C7D57	4139705C
(720)	C1AA4088	4581E898	45705DF4	461F968C	4581E898	45B239E3	459FD2D0	458B3337	461CA5B6	45BE3970
(760)	4540F9FB	452A495D	00000000	46161B4C	463A25AC	453D6F97	00000000	462FDC69	461E73B7	0299E4E1
(800)	00000008	434EE0E5	439AC1B6	C281E56F	40135FAA	40EDEC2D	405C7C34	413ADD95	C171C286	458B3337
(840)	46116988	45CED7BE	459527B5	45CED7BE	47216CFB	00000000	46155E4B	45EA886C	46161B4C	4548AE65
(880)	4535E83A	46E5AEC8	44221E56	46580263	4818E7F9	46104FFC	455576C9	411CCCCC	038C0000	000B735D
(920)	028B5D0F	00000007	435C2B56	437D4653	C34F93FD	401403D3	40EDDB91	405C83F8	412F5C2B	C21EECEB
(960)	457586EB	455EC86C	455B6486	45671240	457586EB	455B6486	45581FBC	454FC265	45496244	454F0076
(1000)	4549C588	454F0076	454F0076	45575344	454F0076	454F0076	4544E313	4548C485	028D7908	00000007
(1040)	435B5E98	4383537D	C345E1CA	4013EBFF	40EDDE00	405C82DA	41315B68	C21B8F9E	455B6486	455EC86C
(1080)	457586EB	455EC86C	455B6486	455B6486	455EC86C	454E2C7D	45596ECB	4544E313	454F0076	45608656
(1120)	454F0076	45575344	454F0076	45575344	4546283D	454E48A4	028F9502	00000007	435A2DC7	4388D0F0
(1160)	C33BE2E0	4013D42A	40EDE06D	405C81BB	4133360A	C218285F	45581FBC	455EC86C	455EC86C	45581FBC
(1200)	455EC86C	45671240	455B6486	454FC265	454E2C7D	45405387	45575344	454F0076	4544E313	4549C588
(1240)	45575344	4544E313	4548C485	4544E313	029180FB	00000007	435896F3	438DB396	C331A03C	4013BC55
(1280)	40EDE2D9	405C809B	4134F10E	C214B853	45581FBC	455EC86C	455B6486	455EC86C	45581FBC	45581FBC
(1320)	455B6486	45514BAF	454C8B1E	4549C588	4549C588	4549C588	4549C588	4549C588	454F0076	454F0076
(1360)	4544E313	4546283D	0293CCF4	00000007	4356A001	4391FC63	C32727DB	4013A481	40EDE542	405C7F7B
(1400)	413692C3	C21140FC	455B6486	45671240	45671240	455EC86C	455EC86C	457586EB	455B6486	456C04B6
(1440)	4557BE0E	4549C588	4549C588	45575344	454F0076	4544E313	4549C588	4549C588	454136B1	4543A3E2
(1480)	0295E8EE	00000007	43544AD0	4395A687	C31C84A3	40138CAD	40EDE7A9	405C7E59	41381F46	C1DC3483
(1520)	45901753	455EC86C	458369AE	45AD3C47	45671240	457586EB	458369AE	45702547	45608656	4544E313
(1560)	454F0076	45575344	4544E313	4549C588	4549C588	454F0076	4543A3E2	4543A3E2	029804E7	00000007
(1600)	435194BD	4398A4AC	C311C0A0	401374D8	40EDEA0E	405C7D37	41399966	C1A3FC3C	457586EB	455EC86C
(1640)	45671240	455EC86C	45671240	455EC86C	455B6486	4552DC8B	4557BE0E	4544E313	4549C588	4549C588
(1680)	4544E313	45575344	4544E313	4549C588	4543A3E2	45426A6F	029A20E0	00000007	434E8557	439AFB89
(1720)	C26E95A3	40135D05	40EDEC70	405C7C14	413B0564	C16B7743	457586EB	45671240	455B6486	45671240
(1760)	45671240	45671240	45671240	4557BE0E	455B27C8	45378069	4544E313	4549C588	454F0076	454F0076
(1800)	4549C588	4549C588	4544E313	4543A3E2	411CCCCC	038C0000	000B735D	028B990E	00000006	435C19F0
(1840)	437DF9E1	C34E84A0	4014012E	40EDDBD6	405C83D8	412F9724	C21E8DCC	45885866	45885866	45885866
(1880)	45885866	45885866	4592C544	45885866	45DF914D	45F2C255	458012B6	45771343	457B7E1B	45771343
(1920)	45771343	457B7E1B	457B7E1B	459BF371	45A33C53	028DB508	00000006	435B4309	4383F8DE	C344CA1C
(1960)	4013E959	40EDDE46	405C82BA	41319258	C21B2F68	45885866	45771817	45885866	4592C544	45885866
(2000)	457F2BE5	457F2BE5	45DC6C42	45E946EB	45771343	45771343	4572D111	457B7E1B	457B7E1B	457B7E1B
(2040)	457B7E1B	45A33C53	45A33C53	028FD101	00000006	435A0430	43896186	C33AC13F	4013D184	40EDE0B2
(2080)	405C819E	413364 4D	C217C6E2	459DFE47	45885866	45885866	457F2BE5	457F2BE5	457F2BE5	4592C544
(2120)	45E5FE84	45DC6C42	457B7E1B	45771343	45771343	45771343	4572D111	45771343	4584D2F0	459BF371

(30080)	461032BF	4611[illegible]763	005D830B	00000009	C3632212	C39131FC	42D3CD28	C01C4015	40EE7F89	4058A315
(30120)	41FF7623	41C72589	45FB4048	45DF6B7D	4613DBF7	4613DBF7	45FB404B	45DF6B7D	4611A8CF	45D3700F
(30160)	45C8D0DA	468047F9	45613B33	00000000	461CB5EF	46FEFA47	455911E2	00000000	472ECF9A	486C5673
(30200)	005FA409	00000009	C360DC71	C3937640	4225AD92	C01C5777	40EE7DC1	4058A06A	42100839	418E8F02
(30240)	4616554B	4613DBF7	4616554B	4613DBF7	4623B812	4613DBF7	4616554B	46181C70	46285ED4	4610323C
(30280)	459A8C51	45EB60BC	45E09224	45DD14A0	45DD14A0	45C93E98	46133CDA	46183BC6	0061C008	00000009
(30320)	C35E316B	C3952022	C288998B	C01C6ED8	40EE7BF6	40589DC0	4210191B	41561E42	4613DBF7	45DF6B7D
(30360)	4613DBF7	45FB404B	4613DBF7	45FB404B	45DF6B7D	45E66772	45EE7573	00000000	46127C4E	45885ABB
(30400)	4A195F4F	464541EA	45885ABB	458013C6	465B2D8B	46133CDA	0063DC07	00000009	C35B229A	C3962C19
(30440)	C313652D	C01C8639	40EE7A29	40589B14	42102A29	411DD746	45FB404B	45DF6B7D	4611A8CF	45C6ABA9
(30480)	45DF6B7D	45C6ABA9	45C6ABA9	45B20F70	45AC0BB6	4A1AED42	45F8025C	46127C4E	4610ED68	46160B9D
(30520)	4610ED68	45E31ADD	45CFC591	45E80DA6	0065F806	00000009	C357B0A3	C39694A8	C31E2BA3	C01C9D99
(30560)	40EE785B	40589868	42103B85	C11A40FB	00000000	457179B7	457CC2FF	458BB13F	457CC2FF	457179B7
(30600)	457179B7	4567EA8F	45660F88	4A312C6C	455F8EC1	4558601D	4585E5C4	4558601D	456752EC	457A9C8D
(30640)	4562EC53	45647F65	00681404	00000009	C353E38D	C39660A4	C328D296	C01CB4F8	40EE768A	405895BA
(30680)	42104D4D	C1522884	00000000	457CC2FF	458BB13F	457179B7	457CC2FF	4568A646	457179B7	456BBAA7
(30720)	45643D10	4A3023AC	455F8EC1	456752EC	4592391A	455F8EC1	454712B7	455F8EC1	45695F60	456618D4
(30760)	006A3003	00000009	C34FBF55	C395908F	C3334F68	C01CCC58	40EE74B8	4058930D	42105FA2	C189DB60
(30800)	00000000	457179B7	457CC2FF	457CC2FF	457179B7	458BB13F	457179B7	4569CE32	45643D10	4A312C6C
(30840)	456752EC	455F8EC1	455F8EC1	45704697	456752EC	45704697	45647F65	45695F60	411B851E	038C0000
(30880)	00B7420	005BA80C	00000008	C364CDA4	C38EAAF1	4316DDC4	C01C2B4D	40EE811D	4058A572	41FE85A1
(30920)	41F99068	45883975	45883975	45883975	45883975	4591EEB5	45883975	457F0AC0	45839E4E	457C471D
(30960)	45C08C26	45DA7A96	45C08C26	45DA7A96	45C08C26	45C08C26	461194A4	45A83F64	45ADB2A5	005DC40B
(31000)	00000008	C362E5AC	C39178C5	42C079E0	C01C42AF	40EE7F56	4058A2C9	41FF941B	41C0DA6A	45883975
(31040)	457F0AC0	4591EEB5	4591EEB5	4591EEB5	4591EEB5	45883975	45821DCA	4580A1CA	45DA7A96	45C08C26
(31080)	45A9B177	45DA7A96	45DA7A96	45C08C26	45A9B177	45B07D1C	45ADB2A5	005FE009	00000008	C36095FA
(31120)	C393ADF4	42124EDD	C01C5A10	40EE7D8E	4058A01E	42100A18	41884778	459C2F88	4591EEB5	45883975
(31160)	4591EEB5	45883975	45883975	4591EEB5	4589CD5E	458B64A1	00000000	45F7E72E	45C08C26	45958D71
(31200)	45A9B177	45C08C26	45A9B177	45B634EE	45C23401	0061FC08	00000008	C35DE0A7	C39547DB	C29BF357
(31240)	C01C7171	40EE7BC3	40589D74	42101AFD	414FDAC8	459C2F88	4591EEB5	45883975	45883975	45883975
(31280)	4591EEB5	45ACE62A	45883AB0	4598CC52	46311A39	4559B1D0	45444B31	00000000	461194A4	4621112E
(31320)	456B91DD	45C85599	463D782C	00641807	00000008	C35AC415	C3963D92	C31498A3	C01C88D2	40EE79F6
(31360)	40589AC8	42102C14	411799EF	457F0AC0	4591EEB5	4591EEB5	4591EEB5	45883975	45883975	45883975
(31400)	457B11DF	457F29E8	45A9B177	45A9B177	45DA7A96	45DA7A96	4613F2CA	45F7E72E	45958D71	45AAF37A
(31440)	4598E6B4	00663406	00000008	C3574906	C39696C0	C31F5C6F	C01CA032	40EE7827	4058981C	42103D79
(31480)	C12079B3	45883975	457F0AC0	4591EEB5	457F0AC0	45883975	457F0AC0	45883975	4580A1CA	4585235B
(31520)	45A9B177	4583CD20	45767190	45A9B177	45767190	45C08C26	45958D71	457AB067	45869807	00685004
(31560)	00000008	C353732E	C3965361	C329FFC7	C01CB791	40EE7656	4058956E	42104F4D	C1585C45	45883975
(31600)	457F0AC0	45763F8D	457F0AC0	457F0AC0	45883975	45883975	45821DCA	457C471D	45767190	456C888A
(31640)	45958D71	4583CD20	45767190	456C888A	4583CD20	45825ED1	458AF455	006A6C03	00000008	C34F42C0
(31680)	C3956CD9	C334759A	C01CCEF1	40EE7483	405892C1	421061BA	C190071C	4591EEB5	457F0AC0	45883975
(31720)	45883975	457F0AC0	45883975	45883975	4580A1CA	4589CD5E	45A9B177	45A9B177	45958D71	45C08C26
(31760)	45A9B177	45958D71	45A9B177	458AF455	4588C1A5	411B851E				

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(0)	5C3C0000	038C0000	000B7424	00204A7C	00000007	432342D4	4374E799	437A7E54	C0D224DF	408DA020
(40)	40244CD0	4142C639	4228A27E	457CE335	45668B10	45668B10	457CE335	45668B10	456FB8D0	45668B10
(80)	45607123	4565E3EA	455C5FA7	455C5FA7	45556D46	45556D46	454F0076	455C5FA7	454985EF	4559020F
(120)	454BC5E1	00226678	00000007	431CA7A0	436EB8A3	4381B423	C0D2314B	408D8F94	40244575	414457C9
(160)	422C4A70	456FB8D0	45668B10	45668B10	456FB8D0	45668B10	45668B10	456FB8D0	45640A81	45607123
(200)	454F0076	455C5FA7	45556D46	455C5FA7	455C5FA7	455C5FA7	455C5FA7	45504CF6	454A48D1	00248273
(240)	00000007	4315EC8C	43680E92	438859BD	C0D23DB4	408D7F06	40243E19	414613CA	422FEF46	45668B10
(280)	456FB8D0	455AEF52	45668B10	45668B10	456FB8D0	45668B10	455EB0FE	45607123	454F0076	45446C85
(320)	454F0076	454985EF	454985EF	454985EF	454985EF	454A48D1	454A48D1	00269E6F	00000007	42F18202
(360)	4360ECA5	438E627E	C0D24A1D	408D6E77	402436BD	4148094D	42338F9A	456FB8D0	45668B10	45668B10
(400)	4560907F	45668B10	456FB8D0	45668B10	45623984	45623984	455C5FA7	45556D46	45556D46	454985EF
(440)	454F0076	45556D46	454F0076	454D4AAD	4551F898	0028BA6A	00000007	42832934	43595C77	4393C916
(480)	C0D25684	408D5DE7	40242F61	414A4A7B	423729A2	456FB8D0	45668B10	4560907F	456FB8D0	45668B10
(520)	45668B10	45668B10	455CF8F0	455EB0FE	454985EF	454F0076	455C5FA7	45556D46	454F0076	454985EF
(560)	45556D46	454A48D1	454764ED	002AD666	00000007	42143E60	435168E5	43988B44	C0D262EA	408D4D56
(600)	40242804	414CEF29	423ABB12	45668B10	45668B10	45668B10	456FB8D0	45668B10	456FB8D0	45668B10
(640)	455B48E5	455CF8F0	455C5FA7	454F0076	454F0076	454985EF	45556D46	454F0076	454F0076	4545FDE1
(680)	454764ED	002CF261	00000007	C25AC527	4349190B	439CA0C8	C0D26F4E	408D3CC4	402420A7	41501F0C
(720)	423E4026	4560907F	45668B10	45668B10	45668B10	456FB8D0	4560907F	456FB8D0	45607123	45623984
(760)	454985EF	454F0076	45446C85	45556D46	45556D46	454F0076	454985EF	454344BF	45449DD2	002F0E5D
(800)	00000007	C2C95F72	434074B3	43A0011D	C0D27BAF	408D2C31	4024194A	415419D2	4241B2BC	45668B10