DATA CENTER OPERATIONS BRANCH

NDS OPERATIONS PROCEDURE MANUAL
NO. P-A008

SYSTEMS SW & HW
13 April 1983

AUTO CLOUD COVER

SYMBOLIC TITLE: ACCR
ORIGINATOR:

Program ACCR

Date 27 October 1981

APPROVALS

This operations manual has been reviewed and approved by the following persons:

STAT

15 Dec 81
(date)

21 Dec 81
(date)

ii

Program _____ ACCR

Date 23 September 1982

CONTENTS

iii

Program ___ACCR___

Date ___23 September 1982___

SUMMARY

The ACCR software will take an ACCR tape(s) (normally one) produced on the ACCR machine, transform the data, and produce the 633 message. This is all done by one ST command initiated from the console.

As a preliminary step the R752 message must be processed. The R752 will be sent no latter than 30 minutes after the associated R750. Two programs will be executed as a result: MPFMODIFY and ACQ11A. These programs process the RECUR-752 message, update the Mensuration Parameters File (MPF) in the data base, and build the ACCR data files. Upon reciept of the RECUR-752 message the CSP automatically starts 'ESDRIVER' which builds the runstream and starts the run-id 'ACQ752'. MPFMODIFY reads the RECUR message, checks it as a valid message, then extracts the ACCIQAS support data and stores it into the MPF. ACQ11A retrieves data from the MPF, calculates the ground sample distance for each frame/strip, and stores it in the collateral file for ACCR processing.

The runstream started up contains three programs. The first program is a COBOL program to access the XSS*ACCR752 file, produced by the 752. This program (ACCR1) then creates a SDF file XSS*STREAM.) which the FORTRAN math model (ACCR) accesses. This SDF file contains frame and strip length data.

When the COBOL (ACCR1) program finishes, the FORTRAN (ACCR) program starts up. The FORTRAN program first reads in all the information stored in the XSS*STREAM. file. The program next reads the ACCR tape and begins to process the records through the math model. When each substrip/frame has completed processing, it is then written to the scratch tape. When the FORTRAN program finishes processing the ACCR tape, it loads the total image and total subimage count into another SDF file (XSS*STFILE.).

A second COBOL program (ACCRPT) then reads the scratch tape and the XSS*STFILE. file. This program reformats the information into the form of the RECUR - 633 message. This information is then written to a mass storage file XSS*ACCR.).

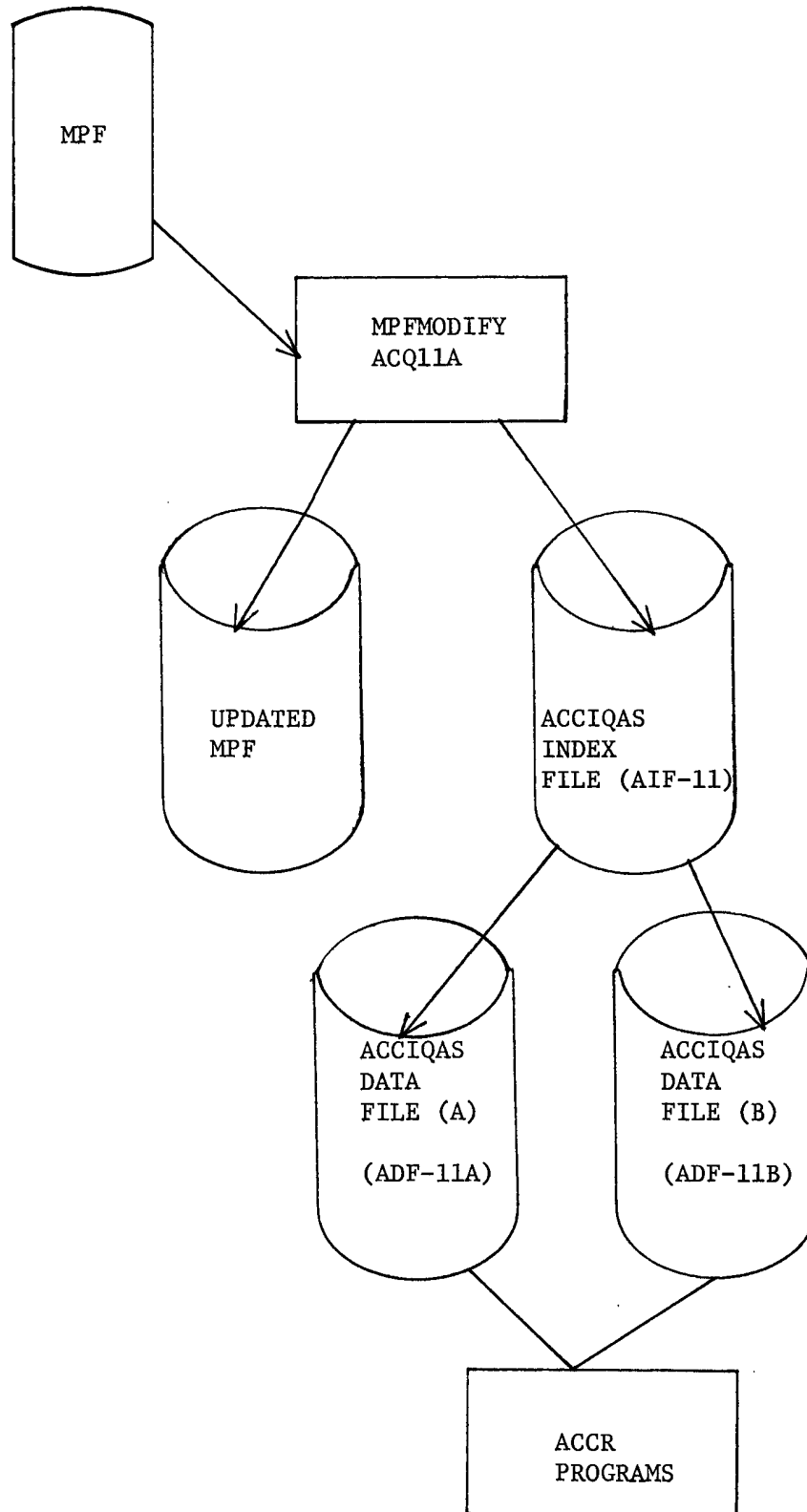An XCH program will then be initiated to read the XSS*ACCR. file and send out the RECUR - 633 message.

The ACCR program will normally be run daily upon receipt of the ACCR tape from the Area. This program should be run before 1700.

1

OPERATIONAL FLOW CHART

```
  ┌─────────┐
  │         │
  │   MPF   │
  │         │
  └─────────┘
        \
         \        ┌──────────────┐
          \       │  MPFMODIFY   │
           ──────▶│   ACQ11A     │
                  └──────────────┘
                   /           \
                  /             \
          ┌──────────┐      ┌──────────────┐
          │ UPDATED  │      │   ACCIQAS    │
          │  MPF     │      │   INDEX      │
          │          │      │ FILE (AIF-11)│
          └──────────┘      └──────────────┘
                            /            \
                 ┌──────────────┐   ┌──────────────┐
                 │  ACCIQAS     │   │  ACCIQAS     │
                 │  DATA        │   │  DATA        │
                 │  FILE (A)    │   │  FILE (B)    │
                 │  (ADF-11A)   │   │  (ADF-11B)   │
                 └──────────────┘   └──────────────┘
                            \          /
                          ┌──────────────┐
                          │    ACCR      │
                          │   PROGRAMS   │
                          └──────────────┘
```

(See next page)

2

Program ACCR

Date 27 October 1981

OPERATIONAL FLOW CHART

```
   ACCR                    ACCR                         R633
   TAPE  ───────────▶   PROGRAMS  ───────────────▶

                             │
XSS*ACCR752.              SCRATCH
  FILE                     TAPE


XSS*PRTR.    XSS*STFILE.                         XSS*STREAM.
  FILE         FILE                                 FILE


                          XSS*ACCR.
                            FILE
```

3
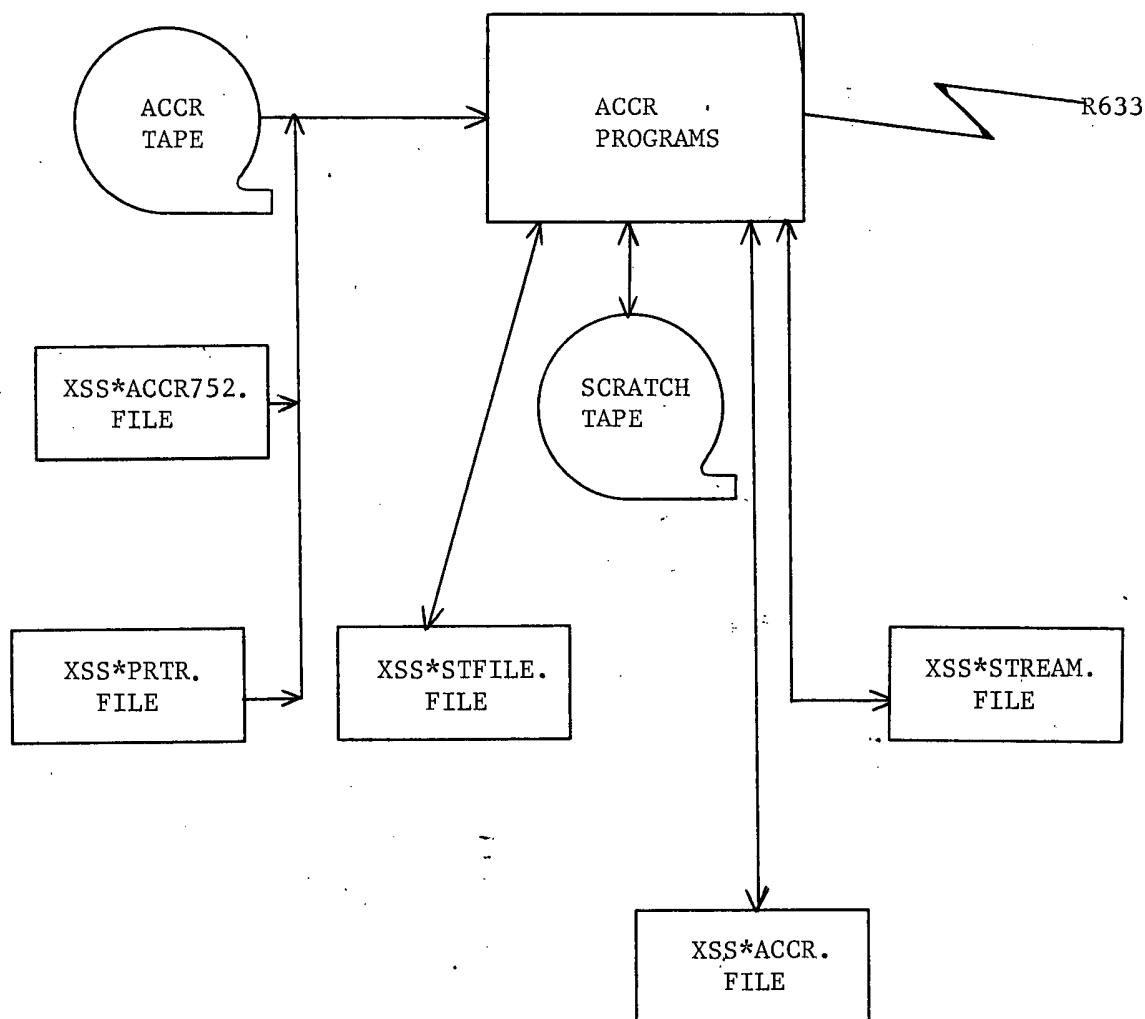
Program ACCR

Date 27 October 1981

COMPUTER RUN PREPARATION

PUNCHED CARD INPUT   None

Type:

Identification:

Format:

N = numeral   Z = optional character (letter of
A = letter   numeral)
X = any legitimate character   & = plus
    in card code   - = minus
                                         S = special character

Field   Column   Comments

4

Program   ACCR

Date 27 October 1981

MAGNETIC TAPE INPUT

Contents and Description of Tape Data Tape produced from the ACCR
machine. This tape is in IBM format.

Unit

Standard Tape Label: None
                     (to be inserted by programmer)

Label Block File Name: (To be inserted
                                                    by TAS)
Mode: 9-Track 1600 BPI

Code: EBCDIC

Record and Block Size: 200 characters per record. One record per block.

File Sequence:

Source Program:

Source Component:

Disposition: This tape needs to be returned to the Area via DCB.
              Adress it to: [   ]   Classification: T/K STAT
                            OD&E/FO/OSB
                            1B04H
Retention Period: 24 Hours

Restrictions:

Quantity: Varies (usually one)

INPUT TAPE FORMAT

TAPE FORMAT:

RECORD TYPE	CHARACTER POSITION		FORMAT	DESCRIPTION
Header Label	1-8		$$$$$$$$	Sentinel
	9-200		Ø	Not Used (Ø fill)
Trailer Label	1-8		////////	Sentinel
	9-200		Ø	Not Used (Ø fill)
Image Records	1-13	Ex.	DDMMYYTPXXXX	Image Id
			14FEB80FR2401	
			14FEB80ST3502	
	14-15		AA	Subframe Id
		Ex.	ƁA	
			ZZ	
	16		X	Item Code
			(Ø,1,2, or 3)	Ø = Cloud Covered
				1 = Cloud Free
				2 = First Item
				3 = Continuation
	17-200		X Y	X, Y Coordinates
			9999 9999	Implied decimal two
		Ex. 1212 ØØ3		places from the
				right (99V99)

6

Program _____ACCR_____

Date __27 October 1981__

MAGNETIC TAPE OUTPUT - None (SCRATCH tape only)

Contents and Description of Tape Data

Unit

Standard Tape Label: _____
                     (to be inserted by programmer)

_____

Label Block File Name:

Mode:

Code:

Record and Block Size:

File Sequence:

Source Component:

Disposition: Upon completion of R633, this tape is then scratched.

Retention Period: Duration of run.

Restrictions:

Quantity: One

7

Program   ACCR

Date 27 October 1981

OUTPUT TAPE FORMAT
     (Use this page if the output tape format is different from the
input tape format.)

Not Applicable

Program ACCR

Date 27 October 1981

HIGH-SPEED PRINTER OUTPUT None

Identification:

Format:

Disposition:

9

Program   ACCR

Date   27 October 1981

PROGRAM LOADING

Type of Program: Batch

Base Address:

ECRT:

General Equation -

Sample Estimate -

FINAL CHECK SUMMARY

ON-LINE COMPUTER PROCESSING

EQUIPMENT REQUIREMENTS

Computer: UNIVAC 1100/84

Storage :

    Core Addendum –

    Core Program _-

    Drum   –

Peripheral Devices: Two tape drives

Restrictions:

Supplies: · -

Program __ACCR_____

Date __27 October 1981_____

NORMAL RUN INSTRUCTIONS

Initiation: The ACCR program is initiated by the computer operator via the following ST keyin: ST XSS*P$RUN.ACCR/XQT

Monitor:

Message	Cause	Operator Action
PLS MOUNT ACCR INPUT TAPE 9-TRK	Program asking for the ACCR tape	Mount the ACCR tape and up the drive
PLS MOUNT ACCR SCRATCH TAPE 9-TRK	Program asking for a SCRATCH tape	Mount a SCRATCH tape and up the drive
ANY MORE TAPES? (Y or N)	Program asking if there are any more ACCR input tapes to run	1. If there are no more ACCR tapes process answer N. 2. If there are more ACCR tapes to process, take off the ACCR tape just processed and replace it with the next ACCR tape to process. Then answer Y.

12

Program <u>ACCR</u>

Date <u>27 October 1981</u>

NORMAL RUN INSTRUCTIONS (Continued)

Interrupt/Reentry: If the program is interrupted, it must be started
again from the beginning.

Termination: The program will be terminated normally upon the successful
transmission of the Recur 633 message.

Take-down:

II Keyins:

Disposition of Data:

13

Program _____ACCR_____

Date __27 October 1981__

ABNORMAL RUN INSTRUCTIONS

Messages:

Message	Cause	Operator Action

In the event that the ACCR programs abort for any reason without having successfully sent out the Recur 633, the following action should be taken by the operator:

    1. Attempt to run the job one more time. If it is still unsuccessful then:

        A. Notify the OPS office at the Area that the R633 message could not be processed and a new ACCR tape would have to be generated and sent up with the next ACCR shipment.

        B. Notify [ ] the next business day.   STAT

14