ECMA EUROPEAN COMPUTER MANUFACTURERS ASSOCIATION

COBOL

TRANSLATIONS

French

German

Italian

November 1965

ACKNOWLEDGMENT

"This publication is based on the COBOL System developed in 1959 by a committee composed of government users and computer manufacturers. The organizations participating in the original development were:

Air Materiel Command, United States Air Force
Bureau of Standards, Department of Commerce
David Taylor Model Basin, Bureau of Ships, U.S. Navy
Electronic Data Processing Division, Minneapolis-Honeywell Regulator Company
Burroughs Corporation
International Business Machines Corporation
Radio Corporation of America
Sylvania Electric Products, Inc.
Univac Division of Sperry Rand Corporation

In addition to the organizations listed above, the following other organizations participated in the work of the Maintenance Group:

Allstate Insurance Company
Bendix Corporation, Computer Division
Control Data Corporation
DuPont Corporation
General Electric Company
General Motors Corporation
Lockheed Aircraft Corporation
National Cash Register Company
Philoc Corporation
Standard Oil Company (N. J.)
United States Steel Corporation

This COBOL-61 manual is the result of contributions made by all of the above-mentioned organizations. No warranty, expressed or implied, is made by any contributor or by the committee as to the accuracy and functioning of the programming system and language. Moreover, no responsibility is assumed by any contributor, or by the committee, in connection therewith.

It is reasonable to assume that a number of improvements and additions will be made to COBOL. Every effort will be made to insure that the improvements and corrections will be made in an orderly fashion, with due recognition of existing users' investments in programming. However, this protection can be positively assured only by individual implementors.

"Procedures have been established for the maintenance of COBOL. Inquiries concerning the procedures and the methods for proposing changes should be directed to the Executive Committee of the Conference on Data System Languages."

"The authors and copyright holders of the copyrighted material used herein: FLOW-MATIC (Trade-mark of Sperry Rand Corporation), Programming for the UNIVAC R I and II, Data Automation Systems © 1958, 1959, Sperry Rand Corporation; IBM Commercial Translator, Form No. F 28-8013, copyrighted 1959 by IBM, FACT, DSI 27A5260-2760, copyrighted 1960 by Minneapolis-Honeywell, have specifically authorized the use of this material, in whole or in part, in the COBOL specifications. Such authorization extends to the reproduction and use of COBOL specifications in programming manuals or similar publications."

"Any organization interested in reproducing the COBOL report and initial specifications in whole or in part, using ideas taken from this report or utilizing this report as the basis for an instruction manual or any other purpose is free to do so. However, all such organizations are requested to reproduce this section as part of the introduction to the document. Those using a short passage, as in a book review, are requested to mention "COBOL" in acknowledgment of the source, but need not quote this entire section."

Free copies of this document are available from ECMA, European Computer Manufacturers Association 114, Rue du Rhône - 1204 Geneva (Switzerland)

INTRODUCTION

In view of existing demand for translation of COBOL into some European non English languages, and considering that it was desirable to avoid possible conflicts between divergent unauthorized versions, the European Computer Manufacturers Association, ECMA (officially recognized by the CODASYL COBOL Committee), has decided to publish translations of COBOL-61 into French, German and Italian.

These translations have been drafted by ECMA experts, submitted to the relevant national standardization bodies and finally drawn up under consideration of all comments received. These translations have then been approved by the Association Française de Normalisation (AFNOR) and the Ente Nazionale Italiano di Unificazione (UNIPREA). The Fachnormenausschuss Informationsverarbeitung (FNI) of the Deutscher Normenausschuss (DNA) intends to refer to the ECMA translations in their forthcoming COBOL special glossary.

 ${
m ECMA}$, as well as the national bodies concerned, strongly recommend full consideration of the following warning:

The following French, German and Italian translations of COBOL-61 formats have been prepared by ECMA. They may be used for presentation of the language. The original version remains the reference one and is recommended as the only source language to be accepted by COBOL compilers.

On each of the following pages the top right figures refer to the corresponding sheet(s) of the COBOL-61 report. Each page is divided into four quarters. The top quarter shows the English original format. The second, third and fourth quarters show the same format with key words translated into French, German and Italian, respectively.

INTRODUCTION

Etant donné la demande de traduction de COBOL en diverses langues européennes autres que l'anglais, et considérant qu'il est souhaitable d'éviter des conflits éventuels entre différentes versions non autorisées, la European Computer Manufacturers Association, ECMA (reconnue officiellement par le CODASYL COBOL Committee) a décidé de publier des traductions de COBOL-61 en français, en allemand et en italien.

Ces traductions, préparées par des experts de l'ECMA, ont été soumises aux organisations nationales de normalisation intéressées; la rédaction finale a tenu compte de toutes les observations exprimées. Ces traductions furent, ensuite, approuvées par l'Association Française de Normalisation (AFNOR) et par l'Ente Nazionale di Unificazione (UNIPREA). Le Fachnormenausschuss Informationsverarbeitung (FNI) du Deutscher Normenausschuss (DNA) a l'intention de citer comme référence les traductions ECMA dans son vocabulaire technique COBOL, à paraître prochainement.

L'ECMA et les organisations nationales de normalisation intéressées recommandent instamment que l'avertissement ci-dessous soit pris en considération:

Les présentes traductions des formats de COBOL-61 en français, allemand et italien ont été rédigées par l'ECMA. Elles peuvent être utilisées pour la présentation du langage. La version originale reste la version de référence et il est recommandé de l'utiliser comme seul langage d'origine destiné à être accepté par un compilateur COBOL.

Dans les pages qui suivent, les numéros indiqués dans l'angle supérieur droit donnent la référence des pages correspondantes du Rapport COBOL-61. Chaque page est divisée en quatre. Le quart supérieur donne le format anglais original. Les second, troisième et quatrième quarts donnent le même format, mais avec les mots clés traduits, respectivement, en français, en allemand et en italien.

EINFUEHRUNG

Im Hinblick auf die bestehende Nachfrage nach einer Uebersetzung von COBOL in einige europäische, nicht englische Sprachen und mit der Ueberlegung, dass es wünschenswert wäre, eventuelle Konflikte zwischen voneinander abweichenden, inoffiziellen Versionen zu vermeiden, hat die European Computer Manufacturers Association, ECMA (vom CODASYL COBOL Committee offiziell anerkannt), beschlossen, Uebersetzungen von COBOL-61 ins Französische, Deutsche und Italienische zu veröffentlichen.

Diese Uebersetzungen wurden von ECMA-Fachleuten entworfen, den entsprechenden nationalen Normenausschüssen unterbreitet und schliesslich unter Berücksichtigung aller Kommentare in ihrer entgültigen Form abgefasst.

Die Association Française de Normalisation (AFNOR) und der Ente Nazionale Italiano di Unificazione (UNIPREA) haben dann diesen Uebersetzungen ihre Zustimmung gegeben. Der Fachnormenausschuss Informationsverarbeitung (FNI) im Deutschen Normenausschuss (DNA) plant, in seinem kommenden Fachwörterbuch auf die vorliegende Veröffentlichung der ECMA hinzuweisen.

ECMA und diese nationalen Normenausschüsse empfehlen, der folgenden Warnung volle Beachtung zu schenken :

Die vorliegenden französischen, deutschen und italienischen Uebersetzungen der COBOL-61 Formate sind von ECMA angefertigt worden. Sie können zur Darstellung der Sprache verwendet werden. Die Orginalfassung bleibt die Bezugssprache und wird als einzige von COBOL-Uebersetzern zu akzeptierende Quellensprache empfohlen.

Die Nummern in der rechten oberen Ecke der folgenden Seiten beziehen sich auf die entsprechenden Seiten des COBOL-61 Report. Jede Seite ist in vier Teile unterteilt. Das oberste Viertel enthält das englische Orginalformat. Der zweite, dritte und vierte Teil enthalten dasselbe Format mit den ins Französische, Deutsche bzw. Italienische übersetzten Schlüsselwörtern.

INTRODUZIONE

In considerazione del fatto che esiste una richiesta di traduzione del COBOL in alcune lingue Europee non Inglesi, ed essendo anche auspicabile evitare possibili conflitti tra divergenti versioni non autorizzate, l'European Computer Manufacturers Association, ECMA (ufficialmente riconosciuta dal CODASYL COBOL Committee), ha preso la decisione di pubblicare le traduzioni del COBOL-61 in Francese, Tedesco e Italiano.

Queste traduzioni, preparate da esperti dell'ECMA, sono state sottoposte alle organizzazioni nazionali di normalizzazione direttamente interessate; tutte le osservazioni sono state prese in considerazione nella redazione del testo finale. Queste traduzioni furono in seguito approvate dall'Association Française de Normalisation (AFNOR) e dall'Ente Nazionale Italiano di Unificazione (UNIPREA). Il Fachnormenausschuss Informationsverarbeitung (FNI) nel Deutscher Normenausschuss (DNA) ha l'intenzione di citare come riferimento le traduzioni ECMA nel suo vocabolario tecnico COBOL, in via di preparazione.

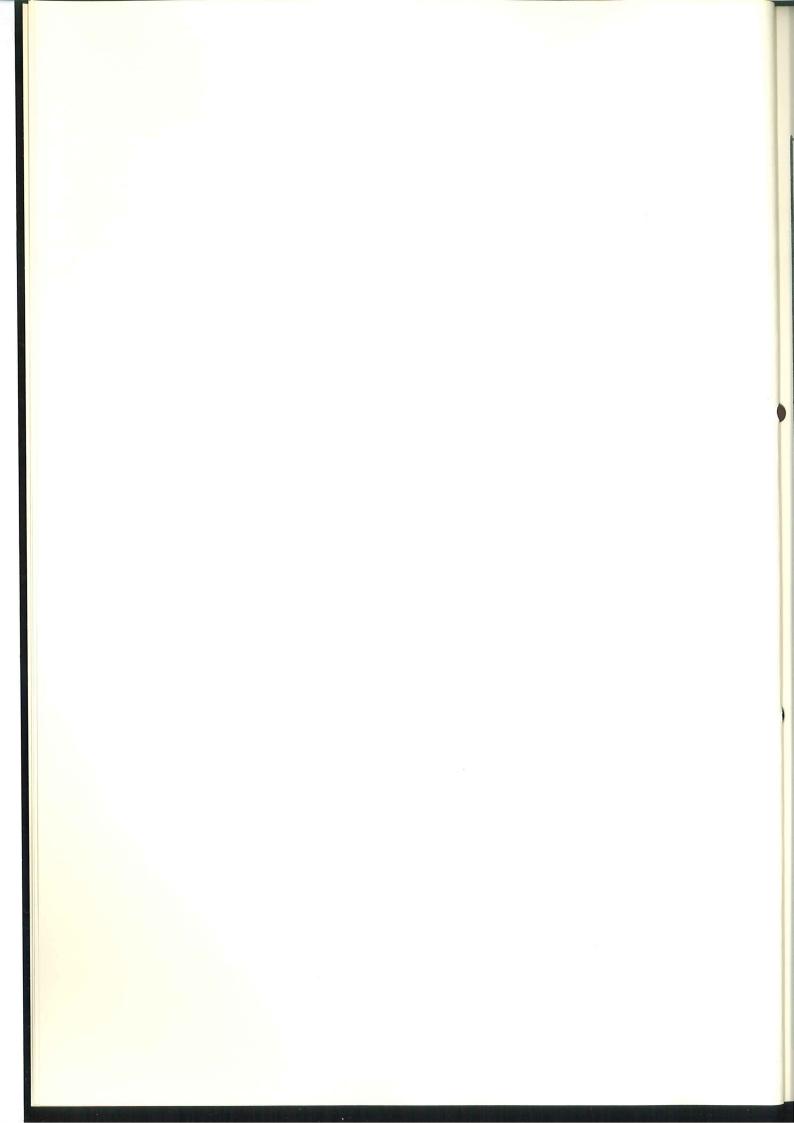
L'ECMA e le organizzazioni nazionali di normalizzazione interessate raccomandano vivamente di attenersi alla seguente norma:

Le seguenti traduzioni Francese, Tedesca e Italiana dei formati del COBOL-61 sono state preparate dall'ECMA. Esse possono essere usate per la presentazione del linguaggio. La versione originale rimane la versione di riferimento ed è raccomandata come l'unico linguaggio sorgente che un compilatore COBOL debba accettare.

Su ciascuna delle pagine seguenti le cifre in alto a destra sono i riferimenti alle corrispondenti pagine del Report COBOL-61. Ciascuna pagine è divisa in quattro quarti. Il quarto superiore mostra il formato originale inglese. Il secondo, terzo e quarto mostrano lo stesso formato con le parole chiave tradotte rispettivamente in Francese, Tedesco e Italiano.

Part 1: General Elements (chapter V)

Data Division (chapter VI)



ZERO, ZEROS, ZEROES

The transfer of the second of

SPACE, SPACES

r. 4

UPPER-BOUND, UPPER-BOUNDS

LOWER-BOUND, LOWER-BOUNDS

HIGH-VALUE, HIGH-VALUES

 $\left\{ \begin{array}{c} \text{NUL} \\ \text{ZERO} \end{array} \right\}$, $\left\{ \begin{array}{c} \text{ZEROS} \end{array} \right\}$, $\left\{ \begin{array}{c} \text{ZEROS} \end{array} \right\}$

ESPACE, ESPACES

BORNE-SUP, BORNES-SUP

BORNE-INF, BORNES-INF

MAXIMUM, MAXIMUM

NULL, NULLEN, NULLEN

LEERZEICHEN, LEERZEICHEN

OBERGRENZE, OBERGRENZEN

UNTERGRENZE, UNTERGRENZEN

HOECHSTWERT, HOECHSTWERTE

ZERO, ZERI, ZERI

SPAZIO, SPAZI

Comment values out

ESTREMO-SUPERIORE, ESTREMI-SUPERIORI

ESTREMO-INFERIORE, ESTREMI-INFERIORI

VALORE-MASSIMO, VALORI-MASSIMI

LOW-VALUE, LOW-VALUES
QUOTE
ALL

MINIMUM, MINIMUM

GUILLEMET
GUILLEMETS

TOUS
PARTOUT

NIEDRIGSTWERT, NIEDRIGSTWERTE

ANFUEHRUNGSZEICHEN

ALLE

VALORE-MINIMO, VALORI-MINIMI

VIRGOLETTE

TUTTI

TALLY		
IN, OF		
COMPTEUR		
DANS, DANS		
	ET BATT HERMOREN BANKE STALL STORE STORE AND A OTHER STALL STALL STALL STALL STALL STALL STALL STALL STALL STA	and the second service and the second
ZAEHLER		
IN, AUS		
·		
	·	
TOTALIZZATORE		

DATA DIVISION PREPARED FOR computer-name.

FILE SECTION.

VI-48 VI-50

WORKING-STORAGE SECTION.

CONSTANT SECTION.

DONNEES PREPAREES POUR computer-name.

FICHIERS.

INTERMEDIAIRES.

CONSTANTES.

DATENTEIL AUFGESTELLT FUER computer-name.

KAPITEL DATEIEN.

KAPITEL ARBEITSSPEICHER.

KAPITEL KONSTANTEN.

DIVISIONE DATI PREPARATA PER computer-name.

SEZIONE FILA.

SEZIONE MEMORIE-LAVORO.

SEZIONE COSTANTI.

FD file-name COPY library-name

<u>DF</u> file-name <u>COPIER</u> library-name

DE file-name KOPIERE library-name

<u>DF</u> file-name <u>COPIA</u> library-name

 $\begin{array}{c|c} \hline \textbf{BLOC} & \texttt{CONTIENT} & \hline \textbf{integer-2} & \underline{\textbf{A}} & \texttt{integer-3} \\ \\ \hline & & \\ \hline & &$

;
$$\underline{DATA} = \left\{ \begin{array}{l} \underline{RECORDS} & ARE \\ \underline{RECORD} & IS \end{array} \right\}$$
 data-name-6

data-name-7 ...

;
$$\left\{\frac{\text{NOMS}}{\text{NOM}}\right\}$$
 DES ARTICLES data-name-6

data-name-7 ...

data-name-7 ...

$$\begin{cases}
\frac{\text{DATI}}{\text{SONO}} & \text{SONO} \\
\frac{\text{DATO}}{\text{E}}
\end{cases}$$

data-name-7 ...

; FILE CONTAINS ABOUT integer-1 RECORDS

; FICHIER CONTIENT ENVIRON integer-1 ARTICLES

; DATEI ENTHAELT ETWA integer-1 SAETZE

; FILA CONTIENE CIRCA integer-1 RECORD

```
STANDARD
        RECORDS ARE
                       OMITTED
; LABEL
                       data-name-1
        RECORD IS
                       (library-name-l IN LIBRARY
                       data-name-2
                       libary-name-2 IN LIBARY
                    STANDARD
                    OMIS E S
    LABEL
                    data-name-1
    LABELS
                    library-name-1 DANS BIBLIOTHEQUE
                    data-name-2
                    library-name-2 DANS BIBLIOTHEQUE
                           STANDARD
   ETIKETTEN SIND
                           WEGGELASSEN
                           data-name-1
   ETIKETT IST
                           library-name-1 IN BIBLIOTHEK
                          (data-name-2
                          library-name-2 IN BIBLIOTHEK
                           STANDARD
   ETICHETTE SONO
                            MANCANTE
                            MANCANTI
    ETICHETTA
                           data-name-1
                           library-name-1 IN LIBRERIA
                          (data-name-2
                          (library-name-2 <u>IN</u> LIBRERIA
```

; RECORD CONTAINS [integer-4 TO] integer-5 CHARACTERS

; ARTICLE CONTIENT [integer-4 A] integer-5 CARACTERES

; SATZ ENTHAELT [integer-4 BIS] integer-5 ZEICHEN

; RECORD CONTIENE [integer-4 A] integer-5 CARATTERI

```
RECORDING MODE IS mode
9
```

```
yalue of data-name-3 IS

{literal data-name-4 [HASHED]}

, data-name-5 IS ...]
```

į	CLASS IS		ALPHABETIC	1
			NUMERIC	-
		IS (ALPHANUMERIC	-
			AN)

; KLASSE IST
$$\left\{ \begin{array}{c} \underline{\text{ALPHABETISCH}} \\ \underline{\text{NUMERISCH}} \\ \underline{\text{ALPHANUMERISCH}} \\ \underline{\text{AN}} \end{array} \right)$$

level-number data-name-1 COPY data-name-2 [FROM LIBRARY] $\begin{cases}
 data-name \\
 FILLER
\end{cases}$

level-number data-name-1 COPIER data-name-2 DEPUIS BIBLIOTHEQUE

data-name

level-number
INDEFINI

level-number data-name-1 KOPIERE data-name-2 VON BIBLIOTHEK $\begin{pmatrix}
\text{data-name} \\
\text{data-name}
\end{pmatrix}$ level-number $\begin{pmatrix}
\text{UNBENANNT}
\end{pmatrix}$

```
ZERO SUPPRESS
                         [LEAVING integer PLACES]
     FLOAT DOLLAR SIGN
                            BLANK WHEN ZERO
     ZEROS SUPPRIMES
                                [EN GARDANT integer POSITIONS]
     SYMBOLE MONETAIRE FLOTTANT
    NULLENUNTERDRUECKUNG
                                 AUSSER integer STELLEN
     GLEITENDES WAEHRUNGSZEICHEN
                            LEER BEI NULL
     SOPPRESSIONE ZERI
                           [LASCIANDO integer {POSTO} ]
; CON PROTEZIONE
     SEGNO VALUTA MOBILE
                            BIANCO QUANDO ZERO
```

<u>i</u>	V1-42
; JUSTIFIED $ \left\{ \begin{array}{c} \text{LEFT} \\ \text{RIGHT} \end{array} \right\} $; SYNCHRONIZED $ \left\{ \begin{array}{c} \text{LEFT} \\ \text{RIGHT} \end{array} \right\} $ RIGHT	
(VERS LA) (SUR LA) (DROITE) (SUR LA) (GAUCHE) (DROITE) (SUR LA) (DROITE) (DROITE)	
DATENWORTBUENDIG LINKS RECHTS RECHTS	
$ \left\{\begin{array}{c} \underline{\text{SINISTRA}} \\ \underline{\text{DESTRA}} \end{array}\right\} $ $ \left\{\begin{array}{c} \underline{\text{SINISTRA}} \end{array}\right\} $	

DESTRA

; NORMALIZZATO

```
3
```

; PICTURE IS picture-string DEPENDING ON data-name

; MODELE picture-string SELON data-name

; MASKE IST picture-string ABHAENGIG VON data-name

; IMMAGINE E picture-string IN DIPENDENZA data-name

$$\begin{array}{c|c} \hline \text{; } \underline{\text{VIRGOLA}} \text{ E integer} & \left\{ \begin{array}{c} \underline{\text{POSTI}} \\ \underline{\text{POSTO}} \\ \underline{\text{BIT}} \end{array} \right\} & \left\{ \begin{array}{c} \underline{\text{SINISTRA}} \\ \underline{\text{DESTRA}} \end{array} \right\} \\ \hline \end{array}$$

RANGE IS literal-1 THRU literal-2

ETENDUE DEPUIS literal-1

JUSQUA

literal-2

BEREICH IST literal-1 BIS literal-2

[; INTERVALLO E literal-1 FINO literal-2

[level-number data-name-1 REDEFINES data-name-2]

[66 data-name-1 RENAMES data-name-2 THRU data-name-3]

[level-number data-name-1 <u>REDEFINIT</u> data-name-2]

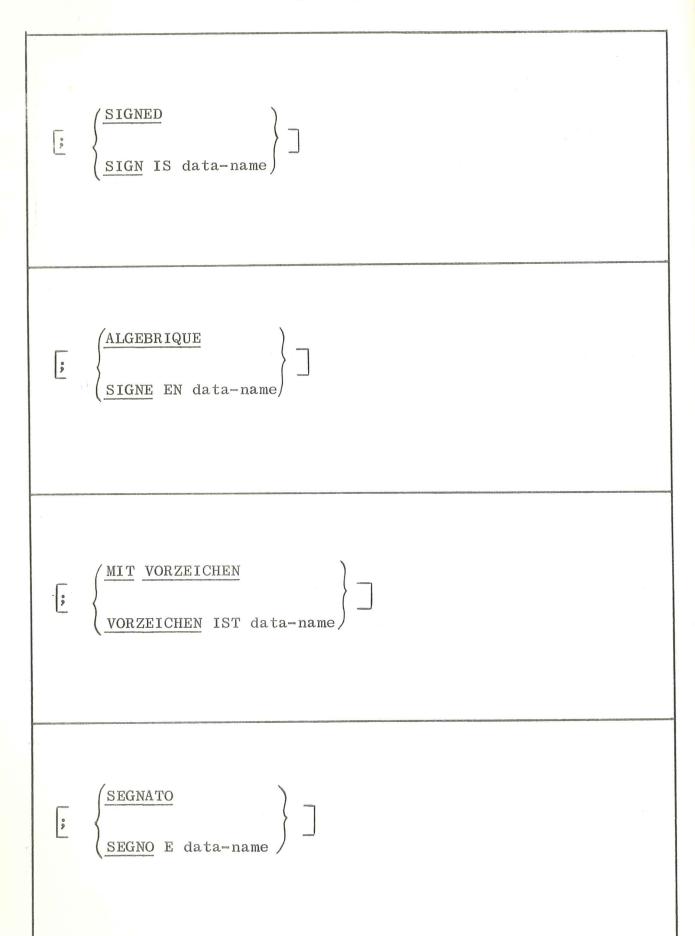
[66 data-name-1 <u>RECOUVRE</u> data-name-2 [\(\frac{JUSQU'A}{JUSQUA} \) data-name-3]

[level-number data-name-1 <u>BELEGT</u> NEU data-name-2]

[66 data-name-1 <u>BENENNT</u> NEU data-name-2 <u>BIS</u> data-name-3]

[level-number data-name-1 RIDEFINISCE data-name-2]

[66 data-name-1 RINOMINA data-name-2 FINO data-name-3]



```
\begin{bmatrix} \vdots & \text{SIZE} & \text{IS} & \text{integer-1} & \text{TO} \end{bmatrix} integer-2 \begin{bmatrix} \text{CHARACTERS} \\ \text{DIGITS} \end{bmatrix}
```

DEPENDING ON data-name

SELON data-name

$$\begin{bmatrix} \mathbf{i} & \underline{\mathbf{LAENGE}} & \mathtt{IST} & \mathtt{integer-1} & \underline{\mathtt{BIS}} \end{bmatrix}$$
 integer-2 $\left\{ \begin{array}{l} \mathtt{ZEICHEN} \\ \mathtt{ZIFFERN} \end{array} \right\}$

ABHAENGIG VON data-name

IN DIPENDENZA data-name

$$\begin{bmatrix} \underline{SIZE} \ IS \ [integer-1 \ \underline{TO}] \end{bmatrix}$$
 integer-2 $\begin{bmatrix} \left(\frac{ALPHABETIC}{NUMERIC} \\ \frac{ALPHANUMERIC}{AN} \right) \end{bmatrix}$

; LAENGE IST [integer-1 BIS] integer-2
$$\begin{bmatrix} \frac{\text{ALPHABETISCHE}[S]}{\text{NUMERISCHE}[S]} \\ \frac{\text{ALPHANUMERISCHE}[S]}{\text{AN}} \end{bmatrix}$$

; DIMENSIONE E [integer-1
$$\overline{A}$$
] integer-2 {CARATTER(E,I)} {CIFR(A,E)}
$$\left[\begin{array}{c} \underline{ALFABETIC(O,I,A,HE)} \\ \underline{NUMERIC(O,I,A,HE)} \\ \underline{ALFANUMERIC(O,I,A,HE)} \\ \underline{AN} \end{array} \right]$$

```
    COMPUTATIONAL

    COMPUTATIONAL-n

    DISPLAY

    DISPLAY-n

CHARACTER [S]

DEPENDING ON data-name
```

Later or construction of the second	
; USAGE IS	COMPUTATIONAL COMPUTATIONAL-n DISPLAY DISPLAY DISPLAY-n
; USAGE	INTERNE INTERNE EXTERNE EXTERNE
; VERWENDUNG IS	$ \begin{array}{c} \left(\frac{\text{RECHENBETONT}}{\text{RECHENBETONT-n}}\right) \\ \underline{\text{E-A-BETONT}}\\ \underline{\text{E-A-BETONT-n}} \end{array} $
; USO E PER	CALCOLARE CALCOLARE-n ESPORRE EXPORRE-n

, literal-3 THRU literal-4 ...

 $[, DEPUIS literal-3] \left\{ \frac{JUSQU'A}{JUSQUA} \right\} literal-4]...$

$$\left\{ \begin{array}{c} \underline{\text{WERT IST}} \\ \\ \underline{\text{WERTE SIND}} \end{array} \right\} \quad \text{literal-1} \quad \left[\underline{\text{BIS}} \; \text{literal-2} \right]$$

, literal-3 BIS literal-4 ...

[, literal-3 FINO literal-4]...

BEGINNING-TAPE-LABEL, BEGINNING-FILE-LABEL

ENDING-TAPE-LABEL, ENDING-FILE-LABEL

IDENTIFICATION, ID

REEL-NUMBER, DATA-WRITTEN

PURGE-DATE, TEST-PATTERN

LABEL-DEBUT-DE-BANDE, LABEL-DEBUT-DE-FICHIER

LABEL-FIN-DE-BANDE, LABEL-FIN-DE-FICHIER

IDENTIFICATION, ID

NUMERO-DE-BOBINE,

{ DATE-D'ECRITURE } CATE-DECRITURE }

DATE-LIMITE, TYPE-DE-TEST

SPULENANFANGSETIKETT, DATEIANFANGSETIKETT

SPULENENDETIKETT, DATEIENDETIKETT

BEZEICHNUNG, BEZ

SPULENNUMMER, SCHREIBDATUM

VERFALLDATUM, PRUEFMUSTER

ETICHETTA-INIZIO-NASTRO, ETICHETTA-INIZIO-FILA

ETICHETTA-FINE-NASTRO, ETICHETTA-FINE-FILA

IDENTIFICAZIONE, ID

NUMERO-BOBINA, DATA-SCRITTURA

DATA-CANCELLAZIONE, CONTROLLO-FASE

BLOCK-COUNT, RECORD-COUNT

MEMORY-DUMP-KEY, SENTINEL

MEMORY-DUMP, NO-MEMORY-DUMP

END-OF-FILE, END-OF-TAPE

NOMBRE-DE-BLOCS,

(NOMBRE-D'ARTICLES)

NOMBRE-D'ARTICLES

CRITERE-VIDAGE-MC, DRAPEAU

VIDAGE-MC, PAS-VIDAGE-MC

FIN-FICHIER, FIN-BANDE

BLOCKZAEHLUNG, SATZZAEHLUNG SPEICHERAUSZUGSCHLUESSEL, MERKMAL SPEICHERAUSZUG, KEIN SPEICHERAUSZUG DATEIENDE, SPULENENDE

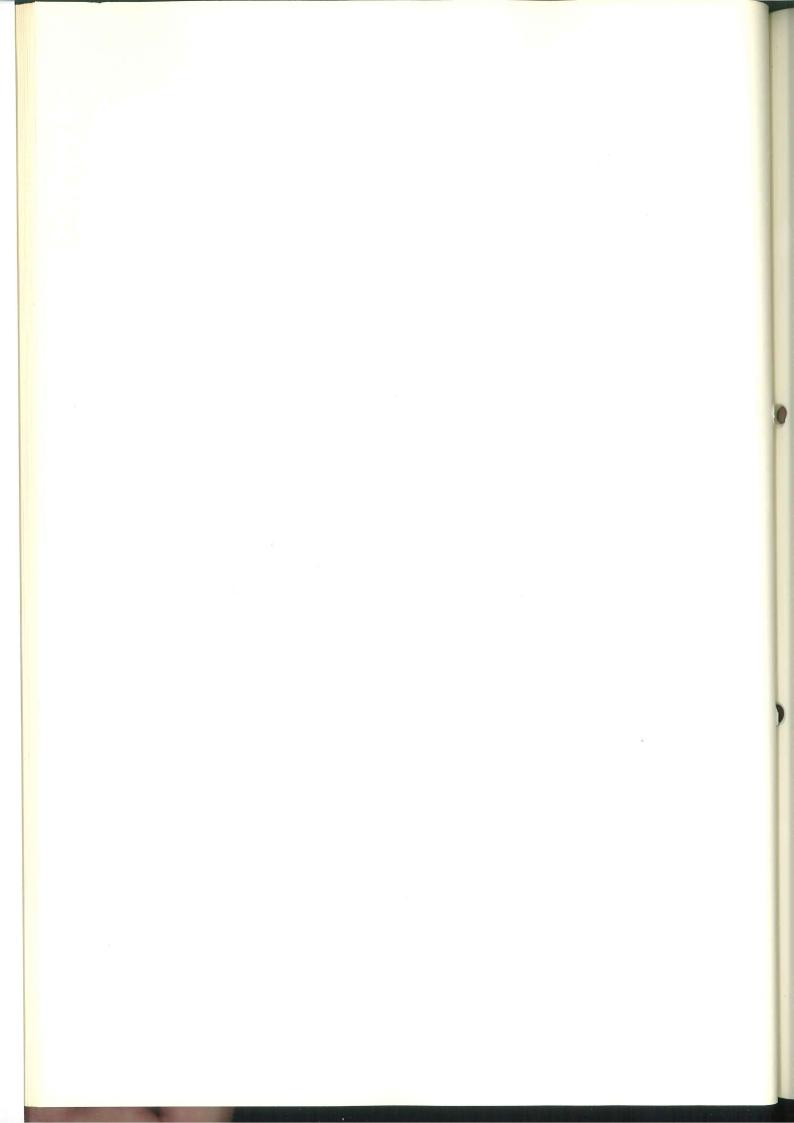
CONTA-BLOCCHI, CONTA-RECORD INDICATORE-SCARICO-MEMORIA, DISTINTIVO SCARICO-MEMORIA, SENZA-SCARICO-MEMORIA FINE-FILA, FINE-NASTRO



Part 2: Procedure Division (chapter VII)

Environment Division (chapter VIII)

Identification Division (chapter IX)



```
statement-1
   condition
IF
                             NEXT SENTENCE
                            (statement-2
                             NEXT SENTENCE
                             statement-1
   condition
SI
                             PHRASE SUIVANTE
                            (statement-2
               SINON
                             PHRASE SUIVANTE
                              statement-1
WENN condition DANN
                             NAECHSTER PROGRAMMSATZ
                              statement-2
                              NEACHSTER PROGRAMMSATZ
                              statement-1
    condition
SE
                              PERIODO SEGUENTE
                             statement-2
               ALTRIMENTI
                              PERIODO SEGUENTE
```

PROCEDURE DIVISION.

DECLARATIVES.

END DECLARATIVES.

procedure-name <u>SECTION</u> [priority].

TRAITEMENT.

DECLARATIONS.

BORNE DECLARATIONS.

procedure-name <u>SECTION</u> priority.

PROZEDURTEIL.

VEREINBARUNGEN.

ENDE DER VEREINBARUNGEN.

KAPITEL procedure-name priority.

DIVISIONE PROCEDURA.

DICHIARATIVE.

FINE DICHIARATIVE.

SEZIONE procedure-name priority.

$$\text{statement-1} \left[\begin{array}{c} \vdots \\ \\ \\ \text{THEN} \end{array} \right] \quad \text{statement-2} \dots \right].$$

$$\text{statement-1} \left[\left. \left\{ \right. \right\} \right] \quad \text{statement-2} \ldots \right].$$

statement-1
$$\left[\begin{cases} ; \\ DANN \end{cases} \right]$$
 statement-2 ... $\left[\begin{cases} . \\ . \\ . \end{cases} \right]$

$$\text{statement-1} \left[\left\{ \begin{array}{c} \vdots \\ \\ \text{ALLORA} \end{array} \right\} \right] \quad \text{statement-2} \dots \right].$$

-	
formula-1	$ \begin{array}{c c} \hline \text{IS } \underline{\text{NOT}} & \left\{ \begin{array}{c} \underline{\text{GREATER}} \\ \underline{\text{LESS}} \\ \underline{\text{EQUAL } \text{TO}} \end{array} \right\} \\ \hline \text{IS } \underline{\text{UNEQUAL } \underline{\text{TO}}} \\ \left\{ \begin{array}{c} \underline{\text{EQUALS}} \\ \underline{\text{EXCEEDS}} \end{array} \right\} \end{array} $
formula-1	$ \left\{ \begin{array}{c} \underline{NON} \\ \underline{NON} \\ \underline{SUPERIEUR} \\ \underline{INFERIEUR} \\ \underline{EGAL} \end{array} \right\} $ $ A \\ \underbrace{INEGAL} \\ \underline{EGALE} \\ \underline{DEPASSE} $ $ A $
formula-1	
formula-1	$ \begin{bmatrix} NON \\ E \end{bmatrix} E \begin{bmatrix} MAGGIORE \\ MINORE \\ UGUALE \end{bmatrix} $ $ A $ $ E \begin{bmatrix} DIVERSO \\ UGUAGLIA \\ SUPERA \end{bmatrix} $ formula-2

PLUS , MINUS
MULTIPLIED BY , TIMES
DIVIDED BY
EXPONENTIATED BY

PLUS , MOINS
MULTIPLIE PAR , FOIS
DIVISE PAR
PUISSANCE

PLUS , MINUS

MULTIPLIZIERT MIT , MAL

DIVIDIERT DURCH

POTENZIERT MIT

PIU , MENO

MOLITPLICATO PER , VOLTE

DIVISO PER

ELEVATO A

ACCEPT data-name FROM mnemonic-name

RECEVOIR data-name DE mnemonic-name

NIMM AUF data-name VON mnemonic-name

ACCETTA data-name DA mnemonic-name

$$\underline{ADD}$$
 operand-1 $[, operand-2 ...]$ $\begin{bmatrix} \frac{TO}{} \\ \underline{GIVING} \end{bmatrix}$ data-name

$$\left\{ \frac{\text{ADDITIONNER}}{\text{AJOUTER}} \right\}$$
 operand-1 [, operand-2 ..] $\left\{ \frac{\text{A}}{\text{RESULTAT}} \right\}$ data-name

ALTER procedure-name-1 TO PROCEED TO procedure-name-2

procedure-name-3 TO PROCEED TO procedure-name-4 ...]

CHANGER procedure-name-1 POUR PASSER A procedure-name-2

procedure-name-3 POUR PASSER A procedure-4 ...

SCHALTE procedure-name-1 AUF procedure-name-2

procedure-name-3 AUF procedure-name-4 ...

ALTERA procedure-name-1 PER PROCEDERE A procedure-name-2

procedure-name-3 PER PROCEDERE A procedure-name-4 ...

```
CLOSE file-name-1 REEL WITH \left(\begin{array}{c} NO & REWIND \\ \hline LOCK \end{array}\right) [file-name-2 ...]
```

FERMER POUR file-name-1 BOBINE COURANTE

SCHLIESSE file-name-1 SPULE

$$\left\{ \begin{array}{c} \underline{\text{OHNE}} & \underline{\text{RUECKSPULEN}} \\ \underline{\text{MIT}} & \underline{\text{VERRIEGELN}} \end{array} \right\} \left] \begin{array}{c} \underline{\text{file-name-2}} \\ \underline{\text{...}} \end{array} \right]$$

CHIUDI BOBINA file-name-1

; ON SIZE ERROR imp-statement

$$\underline{CALCULER} \text{ data-name } \underline{\underline{ARRONDI}} \quad \left\{ \underline{\underline{DE}} \\ \underline{\underline{EGALE}} \right\} \qquad \text{formula}$$

BEI <u>UEBERLAUF</u> imparative-statement

 $\underline{\text{DEFINE}} \text{ verb-name WITH } \underline{\text{FORMAT}}$ DEFINIR verb-name FORME DEFINIERE verb-name MIT FORMAT DEFINISCI verb-name CON FORMATO DISPLAY operand-1 operand-2 ... UPON mnemonic-name

INDIQUER operand-1 operand-2 ... SUR mnemonic-name

GIB AUS operand-1 operand-2 ... AUF mnemonic-name

ESPONI operand-1 operand-2 ... SU mnemonic-name

DIVIDE operand-1 INTO operand-2

GIVING data-name-3 ROUNDED

; ON SIZE ERROR imperative-statement

DIVISER-PAR operand-1 QUANTITE operand-2

RESULTAT data-name-3 ARRONDI

DIVIDIERE operand-2 DURCH operand-1

ERGIBT data-name-3 GERUNDET

; BEI <u>UEBERLAUF</u> imperative-statement

DIVIDI operand-2 PER operand-1

DANDO data-name-3 ARROTONDATO

; PER ERRORE DIMENSIONE imperative-statement

ENTER language-name [routine-name]

EXIT.

NOTE

 $\frac{\text{STOP}}{\left\{\begin{array}{c} \text{literal} \\ \text{RUN} \end{array}\right\}}$

LANGAGE language-name [routine-name]
CONTINUER.

NOTE

 $\frac{\text{ARRET}}{\left\langle \frac{\text{FINAL}}{\left\langle \frac{\text{FINAL}}}{\left\langle \frac{\text{FINAL}}{\left\langle \frac{\text{FINAL}}}{\left\langle \frac{\text{FINAL}}{\left\langle \frac{\text{FINAL}}{\left\langle \frac{\text{FINAL}}}{\left\langle \frac{\text{FINAL}}{\left\langle \frac{\text{FINAL}}}{\left\langle$

TRITT EIN language-name [routine-name]
GEHE WEITER.

MERKE

 $\underline{\text{STOPPE}} \left\{ \begin{array}{c} \text{literal} \\ \\ \underline{\text{LAUF}} \end{array} \right\}$

INIZIA language-name [routine-name]

EXIT

NOTA

1			THE RESIDENCE OF THE PROPERTY
	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	ACING	\[\begin{align*} \left[\frac{\text{UNTIL FIRST}}{\text{ALL}} \\ \frac{\text{LEADING}}{\text{LEADING}} \end{align*} & \text{literal} \\ \left[\frac{\text{ALL}}{\text{LEADING}} \\ \left[\text{UNTIL} \right] \text{FIRST} \end{align*} & \text{lit BY lit} \end{align*}
		į́PUIS	ARRETE A PREMIER TOUS PREMIERS REMPLACEMENT REMPLACER PREMIERS TOUS PREMIERS ARRETE A PREMIER lit PAR lit
131	PRUEFE ZAEHLE data-name UND		
* 1	ERSETZE		$ \begin{pmatrix} \frac{\text{ALLE}}{\text{FUEHRENDE}} & {S \choose N} \\ \frac{\text{BIS}}{\text{ERSTE}} & {S \choose N} \end{pmatrix} $ lit <u>DURCH</u> lit
	ESAMINA TOTALIZZ	ANDO	$\left\{ egin{array}{c} rac{ ext{FINCHE}}{ ext{TUTTI}} & rac{ ext{PRIMO}}{ ext{PRIMI}} ight\} & ext{literal} \\ \hline \end{array} ight\}$
	data-name SOSTITUE	NDO	SOSTITUENDO CON literal TUTTI PRIMI LETURE PRIMO PRIMO

```
GO TO [procedure-name-1 [,procedure-name-2 ...]

[DEPENDING ON data-name]
```

INCLUDE procedure-name

- , REPLACING parameter-1 BY parameter-2
 - parameter-3 BY parameter-4 ...

INCLURE procedure-name

- , PUIS REMPLACER parameter-1 PAR parameter-2
 - parameter-3 PAR parameter-4 ...

FUEGE EIN procedure-name

- , UND ERSETZE parameter-1 DURCH parameter-2
 - , parameter-3 DURCH parameter-4 ...

INCLUDI procedure-name

- , SOSTITUENDO parameter-1 CON parameter-2
 - , parameter-3 CON parameter-4 ...

```
CORRESPONDING data-name-1
MOVE
               literal
            TO data-name-2 [, data-name-3 ...]
                \left\{\begin{bmatrix} \left\{ \begin{array}{c} \operatorname{QUAND} \\ \operatorname{LORSQUE} \end{array} \right\} & \underline{\operatorname{CONCORDANCE}} \end{bmatrix} \right\} data-name-1
TRANSFERER
                              literal
            EN data-name-2 [, data-name-3 ...]
BRINGE (ENTSPRECHEND) data-name-1
              literal
            NACH data-name-2 , data-name-3 ...]
RICOPIA ( CON CORRISPONDENZA data-name-1 )
                 literal
            SU data-name-2 , data-name-3 ...]
```

MULTIPLY operand-1 BY operand-2

GIVING data-name ROUNDED

; ON SIZE ERROR imp-statement

MULTIPLIER operand-1 PAR operand-2

 $\begin{array}{c|c} \hline \textbf{RESULTAT} & \textbf{data-name} & \hline \textbf{ARRONDI} \\ \hline & & & & \\ \hline & & & \\ \textbf{LORSQUE} & & & \\ \hline & & & \\$

MULTIPLIZIERE operand-1 MIT operand-2

ERGIBT data-name GERUNDET

; BEI UEBERLAUF imp-statement

MOLTIPLICA operand-1 PER operand-2

DANDO data-name ARROTONDATO

; PER ERRORE DIMENSIONE imp-statement

```
INPUT file-name-1 REVERSED , file-name-2 ...]
         OUTPUT file-name-3 , file-name-4 ...
OPEN
            POUR ENTREE file-name-1 [INVERSE]

[, file-name-2 ...]

POUR SORTIE file-name-3 [, file-name-4 ...]
OUVRIR
               EINGABE file-name-1 RUECKWAERTS, file-name-2 ...]

AUSGABE file-name-3 , file-name-4 ...]
EROEFFNE
         ENTRATA file-name-1 [INDIETRO]
[, file-name-2 ...]
APRI
          USCITA file-name-3 [, file-name-4 ...]
```

```
PERFORM procedure-name-1 THRU procedure-name-2
     operand-1 TIMES
     UNTIL condition-1
      VARYING data-name-1 FROM operand-2 BY
           operand-3 UNTIL condition-2 AFTER ...
operand-1 FOIS
                 AVEC data-name-1 VARIANT DE operand-2 PAR
          operand-3 \left\{ \frac{\text{LIMITE}}{\text{ARRETER}} \right\} \left\{ \begin{array}{l} \text{LORSQUE} \\ \text{QUAND} \end{array} \right\} condition-2 APRES ...
DURCHLAUFE procedure-name-1 BIS procedure-name-2
     operand-1 MAL
     SOLANGE NICHT condition-1
     UND VARIIERE data-name-1 VON operand-2 UM
          operand-3 SOLANGE NICHT condition-2 [NACH ...
ESEGUI procedure-name-1 FINO procedure-name-2
     operand-1 VOLTE
    FINCHE condition-1
     VARIANDO data-name-2 DA operand-2 PASSO
          operand-3 FINCHE condition-2 POI
```

READ file-name RECORD INTO data-name

; AT END imperative-statement

LIRE file-name PUIS TRANSFERT VERS data-name

LIES file-name SATZ NACH data-name

BEI ENDE imperative-statement

LEGGI RECORD file-name SU data-name

; A FINE imperative-statement

```
SUBTRACT operand-1 [, operand-2... FROM operand-n

GIVING data-name] ROUNDED

; ON SIZE ERROR imperative-statement
```

```
SOUSTRAIRE operand-1 , operand-2... DE operand-n

[RESULTAT data-name] [ARRONDI]

[LORSQUE] (DEPASSEMENT) imperative-statement]

[QUAND] DC
```

SUBTRAHIERE operand-1 ,operand-2... VON operand-n

[ERGIBT data-name] [GERUNDET]

[; BEI UEBERLAUF imperative-statement]

SOTTRAI operand-1 , operand-2... DA operand-n

DANDO data-name ARROTONDATO

; PER ERRORE DIMENSIONE imperative-statement

```
AFTER STANDARD ERROR PROCEDURE
USE
       BEFORE)
                STANDARD (BEGINNING)
                                                LABEL PROCEDURE
                                       FILE
                           ENDING
       AFTER
                                          file-name
                                          INPUT
                                    ON
                                          OUTPUT
           APRES GESTION ERREUR
           AVANT
UTILISER
                    GESTION 1-
                                                     STANDARD
                                        FICHIER
            APRES
                                            file-name
                                     POUR
                                            ENTREE
                                            SORTIE
            NACH
                      FEHLERPROZEDUR
 VERWENDE
             VOR
                                                     SPULENANFANG
                                             FUER
                      ETIKETTENPROZEDUR
                                                     SPULENENDE
             NACH
                                                     DATEIANFANG
                                                    DATEIENDE
                                   BEI
                                        file-name
                                         EINGABE
                                         AUSGABE
                  PROCEDURA STANDARD ERRORE
       DOPO
 USA
       PRIMA DI
                              ETICHETTA
                  PROCEDURA
       DOPO
          STANDARD
                                     file-name
                                 SU
                                     ENTRATE
                                     USCITE
```

WRITE record-name FROM data-name (data-name) LINES integer ADVANCING mnemonic-name record-name DEPUIS data-name ECRIRE (data-name INTERLIGNES SAUT linteger APRES mnemonic-name SCHREIBE record-name VON data-name (data-name) (TRANSPORT VON) ZEILE N (integer VORSCHUB AUF mnemonic-name SCRIVI record-name DA data-name (data-name) PRIMA DI) AVER AVANZATO mnemonic-name

ENVIRONMENT DIVISION.

CONFIGURATION SECTION.

INPUT-OUTPUT SECTION.

COPY library-call

EQUIPEMENT.

CONFIGURATION.

ENTREE-SORTIE.

COPIER library-call

MASCHINENTEIL.

KAPITEL AUSRUESTUNG.

KAPITEL EIN-AUSGABE.

KOPIERE library-call

DIVISIONE AMBIENTAMENTO.

SEZIONE CONFIGURAZIONE.

SEZIONE ENTRATE-USCITE.

COPIA library-call

```
WITH SUPERVISOR CONTROL
SOURCE-COMPUTER. computer-name
                            WORDS
                            CHARACTERS
   MEMORY SIZE | integer-1 |
                            MODULES
                ADDRESS integer-2 THRU integer-3
                                       [, integer-4 ...]
COMPILATION. computer-name AVEC SUPERVISEUR
              integer-1
                          CARACTERES
   MEMOIRE
                          MODULES
              ADRESSE DEPUIS integer-2 { JUSQU'A } integer-3
                                  DEPUIS integer-4 ...
UEBERSETZUNG. computer-name MIT UEBERWACHER
                                  WORTE
                      integer-1
                                 ZEICHEN
  , SPEICHERGROESSE
                                 EINHEITEN
                      ADRESSE integer-2 BIS integer-3
                                            , integer-4 ...
ELABORATORE-TRADUTTORE. computer-name CON CONTROLLO SUPERVISORE
                                     PAROLE
                                     CARATTERI
                        integer-1
   DIMENSIONE MEMORIA
                                     MODULI
                                     MODULO
                         INDIRIZZI integer-2 FINO integer-3
                                        , integer-4 ...
```

OBJECT-COMPUTER. computer-name see VIII-2

, SEGMENT-LIMIT IS literal

, ASSIGN OBJECT-PROGRAM TO input-unit

EXECUTION. computer-name

see VIII-2

, SEGMENTER DEPUIS literal

, METTRE PROGRAMME SUR input-unit

LAUF. computer-name

see VIII-2

, SEGMENTGRENZE IST literal

, MASCHINENKODEPROGRAMM AUF input-unit

ELABORATORE-ESECUTORE. computer-name

see VIII-2

, LIMITE-SEGMENTAZIONE E literal

, ASSEGNA PROGRAMMA-OGETTO A input-unit

```
SPECIAL-NAMES. hardware-name-1 IS mnemonic-name
             , ON STATUS IS condition-name-1
             , OFF STATUS IS condition-name-2
                             hardware-name-2...
NOMS-SPECIAUX. hardware-name-1 EST DESIGNE PAR mnemonic-name
             , EN FONCTION EST DESIGNE PAR condition-name-1
             , HORS FONCTION EST DESIGNE PAR condition-name-2
                                              hardware-name-2...
SONDERNAMEN. hardware-name-1 IST mnemonic-name
             , ZUSTAND EIN IST condition-name-1
             ZUSTAND AUS IST condition-name-2
                               hardware-name-2...
NOMI-SPECIALI. hardware-name-1 E mnemonic-name
            , STATO SI E condition-name-1, STATO NO E condition-name-2
                           hardware-name-2...
```

```
FILE-CONTROL. SELECT OPTIONAL file-name-1
 RENAMING file-name-2 , ASSIGN TO integer-1 hardware-name-1
    hardware-name-2...
 [FOR MULTIPLE REEL] [, RESERVE \begin{cases} integer-2 \\ NO \end{cases}
              AREAS ]
                      , PRIORITY IS priority
  ALTERNATE
GESTION-FICHIERS. PRENDRE | EVENTUEL | file-name-1
 COPIE DE file-name-2 , METTRE SUR [integer-1] hardware-name-1
    hardware-name-2...
                                         integer-2
 PLUSIEURS BOBINES , NE RESERVER
                                         AUCUNE
  ZONES SUPPLEMENTAIRES )
                            , PRIORITE priority
 ZONE SUPPLEMENTAIRE
DATEIZUORDNUNG. FUER
                      WAHLWEISE
                                  file-name-1
 WIE file-name-2 BENUTZE | integer-1 | hardware-name-1
    hardware-name-2
                                       integer-2
                                       KEINE
 FUER MEHRERE SPULEN
                         RESERVIERE
 {WECHSELBEREICH } ] [VORRANG IST priority]
CONTROLLO-FILA. SCEGLI file-name-1 OPZIONALE
 RINOMINANDO file-name-2 , ASSEGNA A [integer-1] hardware-name-1
    hardware-name-2...
                                (integer-2)
 CON PIU BOBINE , RISERVA
                                NESSUNA
 (ZONE ALTERNE)
                  PRIORITA E priority
 (ZONA ALTERNA)
```

```
APPLY
                      i-o-technique ON file-name-1
I-O-CONTROL.
                        file-name-2
                 ON
 RERUN
                        (hardware-name
                        (END OF REEL
                                             OF file-name-3
                        (integer-1 RECORDS
 EVERY
                         integer-2 CLOCK-UNITS
                         condition-name
GESTION-E-S. EMPLOYER
                       i-o-technique POUR
                                             file-name-1
                        file-name-2
 REPRISE
          UTILISANT
                        hardware-name
                        FIN DE BOBINE
                                              DE file-name-3
 CHAQUE
                        (integer-1 ARTICLES
                         integer-2 UNITES-DE-TEMPS
                        condition-name
E-A-STEUERUNG. BENUTZE i-o-technique FUER file-name-1
                        file-name-2
 WIEDERHOLUNG
                BEI
                        hardware-name
                         SPULENENDE
                                            VON file-name-3
(JEDES)
                        (integer-1 SAETZE
ALLE {
                        integer-2 ZEITEINHEITEN
                        condition-name
CONTROLLO-E-U. APPLICA
                        i-o-technique SU file-name-1
                        file-name-2
RIPRENDI
           SU
                        (hardware-name)
                        FINE BOBINA
                                            DI file-name-3
OGNI
                        (integer-1 RECORD
                        integer-2 UNITA-TEMPO
                        condition-name
```

```
SAME RECORD AREA FOR file-name-4, file-name-5...

MULTIPLE FILE TAPE CONTAINS file-name-6

POSITION integer-3 , file-name-7...
```

[MEME ZONE [ARTICLE] {UTILISE } PAR file-name-4, file-name-5...

BANDE A PLUSIEURS FICHIERS CONTIENT file-name-6

[POSITION integer-3] [, file-name-7...]

GEMEINSAMER (BEREICH SATZBEREICH) FUER file-name-4, file-name-5...]

SPULE FUER MEHRERE DATEIEN ENTHAELT file-name-6

[AUF POSITION integer-3] , file-name-7...]

[; STESSA ZONA DI RECORD] PER file-name-4, file-name-5...

NASTRO CONTIENE PIU FILE file-name-6

[IN POSIZIONE integer-3] [, file-name-7...]

IDENTIFICATION DIVISION.

PROGRAM-ID.

AUTHOR. INSTALLATION.

DATE-WRITTEN. DATE-COMPILED.

SECURITY. REMARKS.

IDENTIFICATION.

PROGRAMME.

AUTEUR. INSTALLATION.

DATE-DE-REDACTION. DATE-DE-COMPILATION.

SECURITE. REMARQUES.

ERKENNUNGSTEIL.

PROGRAMMBEZEICHNUNG.

AUTOR. INSTALLATION.

SCHREIBDATUM. UEBERSETZUNGSDATUM.

GEHEIMHALTUNG. BEMERKUNGEN.

DIVISIONE IDENTIFICAZIONE.

ID-PROGRAMMA.

AUTORE. INSTALLAZIONE.

DATA-SCRITTURA. DATA-COMPILAZIONE.

SICUREZZA. OSSERVAZIONI.

