ESL
A Subsidiary of TRW

TRW

Design Review for Requirements
FBIS Modernization Program
13 August 1984

Contract No. 84X-927700-000

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DESIGN REVIEW FOR REQUIREMENTS

FBIS MODERNIZATION PROGRAM

CONTRACT NO. 84X*927700*000

13 AUGUST 1984

ESL INCORPORATED
A SUBSIDIARY OF TRW
SUNNYVALE, CALIFORNIA

FBIS CDP REQUIREMENTS REVIEW

1. INTRODUCTION AND AGENDA

FBIS CDP REQUIREMENTS REVIEW AGENDA

BRIEFER	TIME	ITEM
	DAY 1	
DAHLBERG	5	1. INTRODUCTION AND AGENDA
DAHLBERG	5	2. PHASE I SUMMARY
		3. SYSTEM REQUIREMENTS ANALYSIS
DAHLBERG	15	- INTRODUCTION
MITOOKA	75	- SYSTEM WIDE CONSIDERATIONS
FRISBIE	80	- BUREAU
	LUNCH	
BEST	60	- HEADQUARTERS OPERATIONS GROUP
MITOOKA	45	- HQ ANALYSIS AND PRODUCTION GROUPS
DAHLBERG	20	4. REQUIREMENTS ISSUES SUMMARY
DAHLBERG	30	5. RFC's
DAHLBERG	10	6. PLANS FOR PHASE II
	DAY 2	
	MORNING	-VISIT TO OPS DAILY REPORT -DISCUSSIONS
	AFTERNOON	-WRAP-UP SESSION -ACTION ITEMS

FBIS CDP REQUIREMENTS REVIEW

2. PHASE I SUMMARY

FBIS CONCEPT DEFINITION
TECHNICAL APPROACH

```
                  2.0                    5.0
            +-------------+        +-------------+
            |  SELECTED   |        |   ASSESS    |
            | TECHNOLOGY  |------->| FEASIBILITY |<-------------------+
            |   SURVEY    |        |  AND RISKS  |                    |
            +-------------+        +-------------+                    |
                  ^                       |                          |
                  1.0                    3.0          4.0           6.0
+-----------+  +-------------+  +-------------+  +-------------+  +-------------+
|   FBIS    |  |   REVIEW    |  |   REFINE    |  |  DEVELOP    |  | COMPARATIVE |
|REQUIREMENTS|->| FUNCTIONAL  |->|PERFORMANCE  |->| ALTERNATIVE |->|  EVAL OF    |->
|           |  |REQUIREMENTS |  |REQUIREMENTS |  |   SYSTEM    |  | CANDIDATE   |
|           |  |             |  |             |  |CONFIGURATIONS| |  SYSTEMS    |
+-----------+  +-------------+  +-------------+  +-------------+  +-------------+
```

- FBIS BASELINE
  REQUIREMENTS
- FMP REQUIREMENTS
- SOW
- FBIS SDS-ESL TECHNICAL
  EXCHANGE MEETINGS
- VISITS

  – FBIS, WASHINGTON D.C.
  – NICOSIA, CYPRUS

- FBIS REQUIREMENTS REVIEW
- REQUIREMENTS ALLOCATION
- PRELIM OPS CONCEPT
- INTERFACES (INT&EXT)
- ACTIVITY CHARTS

- HW/SW/SYSTEM
- RAM
- TIMING
- ACCURACY
- SECURITY

- GENERAL ALTs
- SPECIFIC ALTs
- TRADE STUDIES
- DATA FLOW

- SYSTEM CHARACTERISTICS
- SELECTION CRITERIA
- RECOMMENDED SYSTEM
  SELECTION
- DEVELOPMENT
  REQUIREMENTS

PROGRAM PLAN

```
             7.0                8.0                9.0               10.0
      +-------------+    +-------------+    +-------------+    +-------------+
      | DESCRIPTION |    |   PREPARE   |    |   PREPARE   |    |   FINAL     |
      | OF SELECTED |--->|IMPLEMENTATION|-->|    COST     |--->| DOCUMENTS   |
      |   SYSTEM    |    |  SCHEDULE   |    |  ESTIMATE   |    |             |
      +-------------+    +-------------+    +-------------+    +-------------+
```

- CONCEPT OVERVIEW
- SYSTEM CONFIGURATION
- TECH CHARACTERISTICS
- REL TO OTHER SYSTEMS
- SUMMARY OF REQUIRED HW/SW
- SUMMARY OF DBMS
- ANCILLARY EQUIPMENT
- SECURITY REQUIREMENTS
- FACILITY REQUIREMENTS
- SUPPORT REQUIREMENTS
- PERSONNEL REQUIREMENTS

- SUMMARY OF
  SYSTEM CONCEPT
- SCHEDULE OF EVENTS
- ASSIGNMENT OF
  RESPONSIBILITIES
- IMPLEMENT MANAGEMENT
  CONCEPT
- WORK BREAKDOWN
  STRUCTURE

- COST FACTOR ESTIMATES
- RATIONALE

  – HW COST
  – SW COST
  – FACILITY COSTS
  – PERSONNEL COSTS
  – O&M COSTS

- COST ALTERNATIVES
  AND IMPACTS

- COST/SCHEDULE/WBS
- CONCEPT OF OPERATIONS
- PRELIMINARY SPECIFICATIONS
- DESIGN REVIEW PACKAGES AND
  BRIEFINGS

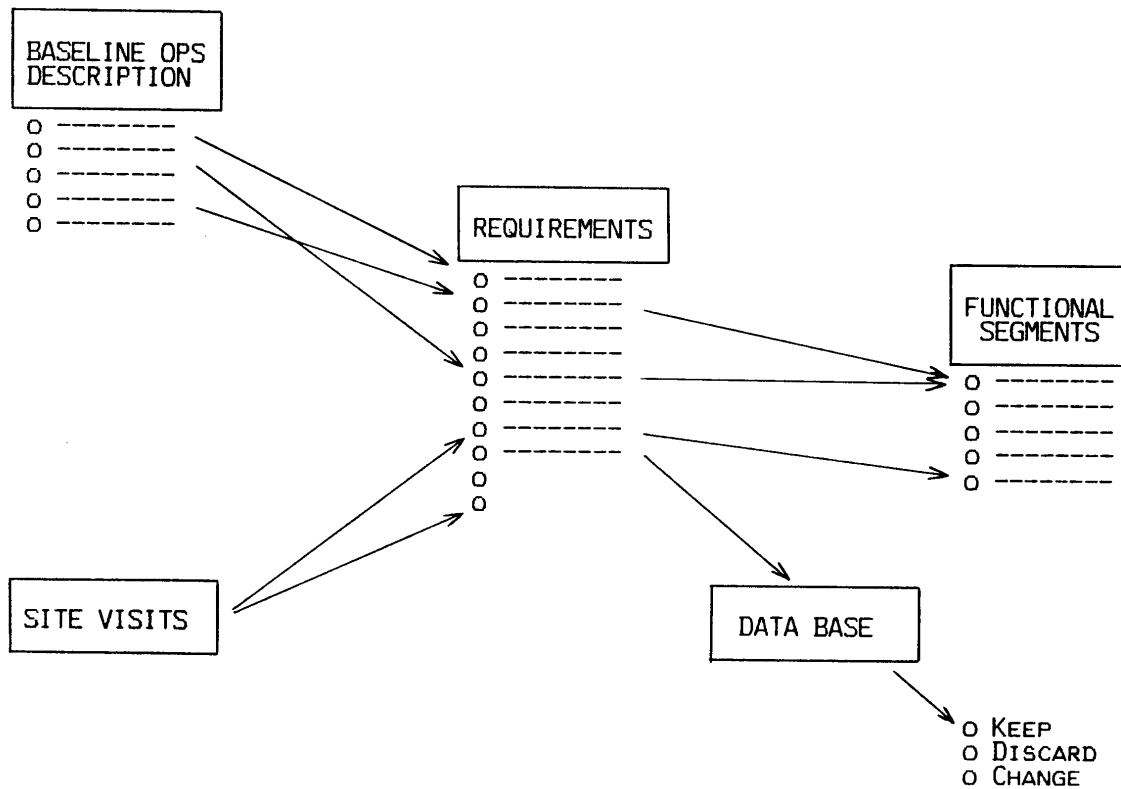# FBIS REQUIREMENTS ANALYSIS RESULTS

O BRIEFING

O NEW/MISSING REQUIREMENTS

35 O RFC'S TO SDS-002

O RECOMMENDATION TO REWRITE SDS-002
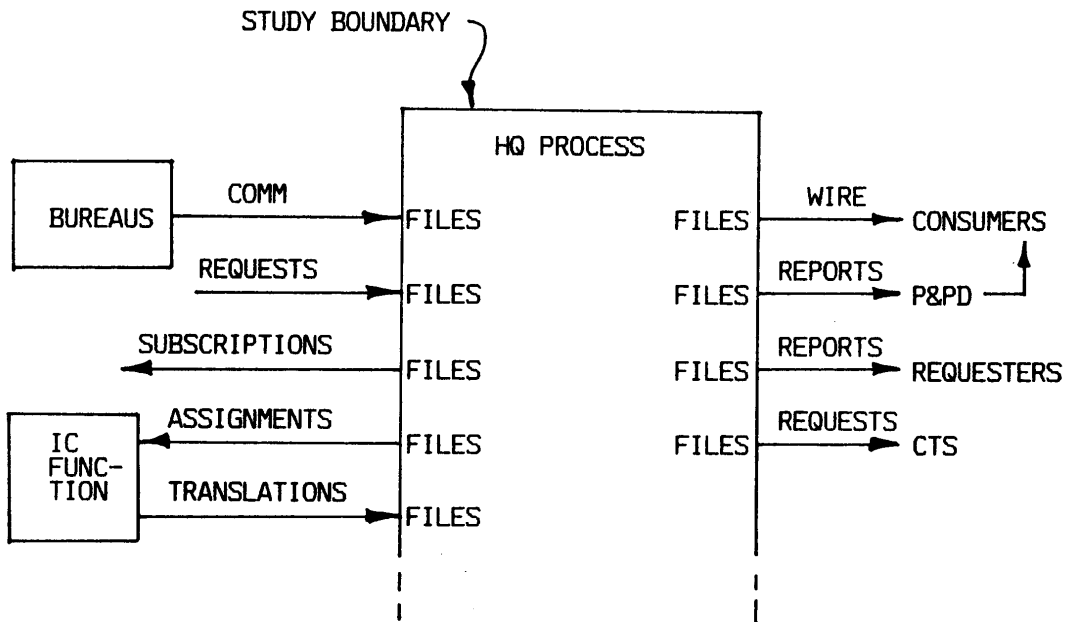
O UNDERSTANDING FOR DESIGN PHASE

FBIS REQUIREMENTS ANALYSIS

```
BASELINE OPS
DESCRIPTION
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
```

```
REQUIREMENTS
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
  o
  o
```

```
FUNCTIONAL
SEGMENTS
  o  --------
  o  --------
  o  --------
  o  --------
  o  --------
```

```
SITE VISITS
```

```
DATA BASE
```

```
o KEEP
o DISCARD
o CHANGE
```

FBIS MODERNIZATION
STUDY BOUNDARIES--BUREAU

STUDY BOUNDARY

BUREAU PROCESS

MONITOR FUNCTION	ANTENNA AND RX	FILES

CONTROL, CRUISING
AND BOARDMAN DATA

FILES — COMM → TO HQ, OTHER BUREAUS, EMBASSY

SUMMARIES, TRANSLA-
TIONS, DATA UPDATES

FILES

WIRE, FAX

FILES

SUBSCRIPTIONS

FILES
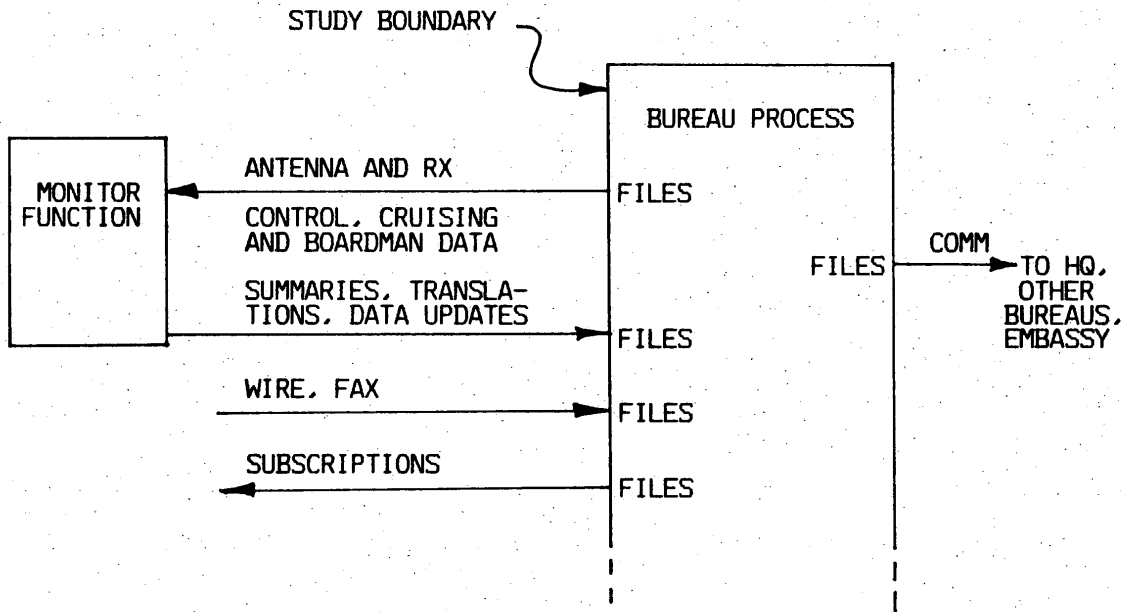
FBIS MODERNIZATION
STUDY BOUNDARIES—HEADQUARTERS

STUDY BOUNDARY

	HQ PROCESS	

BUREAUS

COMM → FILES

REQUESTS → FILES

SUBSCRIPTIONS ← FILES

IC FUNC-TION

ASSIGNMENTS ← FILES

TRANSLATIONS → FILES

FILES — WIRE → CONSUMERS

FILES — REPORTS → P&PD

FILES — REPORTS → REQUESTERS

FILES — REQUESTS → CTS

FBIS CDP REQUIREMENTS REVIEW

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3. SYSTEM REQUIREMENTS ANALYSIS

— INTRODUCTION

- SYSTEM WIDE CONSIDERATIONS

- BUREAU

- HQ OPERATIONS GROUP

- HQ ANALYSIS AND PRODUCTION GROUPS

FBIS REQUIREMENTS ANALYSIS
ORDER OF PRESENTATION

O PROCESS FLOW

O MAJOR MODERNIZATION OPPORTUNITIES

O LEVEL OF IMPORTANCE

O SUMMARY OF NEW/MISSING REQUIREMENTS

FBIS PROCESS FLOW

```
                     $$$$      REQUESTS    (POLICY)
                      |           |           |
                      ↓           ↓           ↓
                     _____
                    |                           |
WORLD PRINT------>  |                           |-------->WIRE SERVICE
      PRESS         |                           |
                    |                           |
   RADIO, TV------> |                           |-------->DAILY REPORTS
                    |           FBIS            |
                    |                           |
WIRE SERVICE----->  |                           |-------->SCHEDULED
                    |                           |             PUBLICATIONS
                    |                           |
OTHER PUBS------>   |                           |-------->REQUESTED
                    |_____|             REPORTS
```

FBIS MODERNIZATION OPPORTUNITIES

```
┌─────────────────────┐                    ┌─────────────────────┐
│   EXISTING SYSTEM   │                    │    NEW DEMANDS       │
└─────────────────────┘                    └─────────────────────┘
              ╲                              ╱
               ╲                            ╱
                ┌─────────────────────┐
                │    NEW TECHNOLOGY   │
                └─────────────────────┘
OPPORTUNITIES      ↓ ↓ ↓ ↓ ↓ ↓
                ┌─────────────────────┐
                │    QUALIFICATION    │
                └─────────────────────┘
                   ↓   ↓   ↓   ↓            CANDIDATE REQUIREMENTS
                ┌─────────────────────┐
                │     EVALUATION      │  ⎫
                └─────────────────────┘  ⎬   FBIS
                          ↓              ⎭
                ┌─────────────────────┐
                │    REQUIREMENT      │
                └─────────────────────┘
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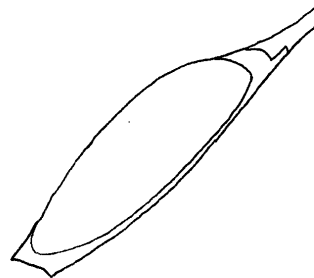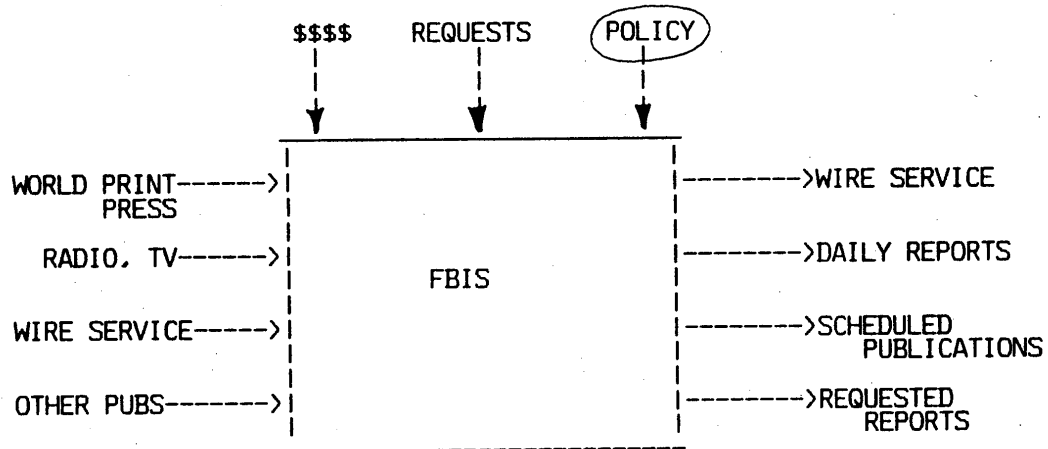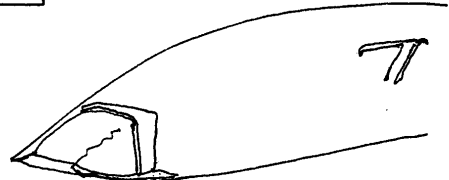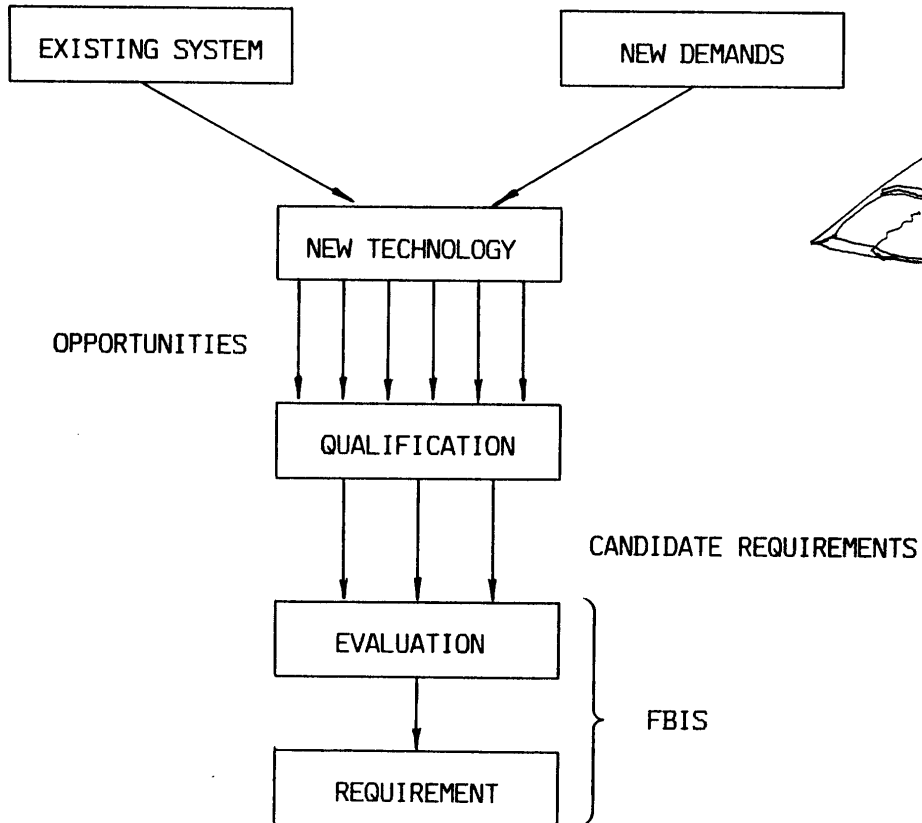
FBIS REQUIREMENTS
LEVEL OF IMPORTANCE

I: LIKELY TO IMPROVE PRODUCT AND PERFORMANCE, SAVE
LABOR, OR IMPROVE EFFICIENCY

II: "NICE" TO HAVE, IMPROVES ENVIRONMENT, RESOURCE
UTILIZATION, OR COMMUNICATIONS

III: OPTIONAL OR SPECIAL, FUNCTION UNIQUE, NOT
OBVIOUSLY BENEFICIAL

3. SYSTEM REQUIREMENTS ANALYSIS

- INTRODUCTION

- SYSTEM WIDE CONSIDERATIONS

- BUREAU

- HQ OPERATIONS GROUP

- HQ ANALYSIS AND PRODUCTION GROUPS

SYSTEM WIDE CONSIDERATIONS

O   MODERNIZATION (DATA FLOW)   *who generates the numbers?*

O   INITIALIZATION / TRANSITION

O   TRAINING   *dropping the system into place? Not necessarily.*

O   SECURITY

O   "...ILITIES"   *maintenance more import because foreign environment*
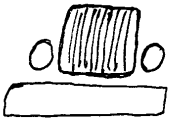
— consumers moving toward
electronics or paper files.
— TV will become more important
as source. Broad-band

FBIS

A CONSUMER SERVICE ORGANIZATION

— data capture 7-10x cost of software development

MODERNIZATION DATA FLOW

SYSTEM DATA TYPES

O   PRODUCT SOURCE MATERIAL FILE

       -     DIRECTORIES *} derived from above?*
       -     INDICES

O   PRODUCTION MANAGEMENT AND CONTROL *< apply to field also?*

O   REFERENCE SUPPORT

PRODUCT SOURCE MATERIAL DATA FLOW

publications

BROADCAST ---→

TV ----------→   BUREAU

PRESS -------→

DAILY
OVERFLOW ----→
                 PRODUCTION
PERIODICALS →   GROUP

BOOKS -------→

DAILY REPORT
LATERAL CONSUMER
WIRE SERVICE

JPRS SERIAL
AD HOC
JOURNALS

ANALYSIS
GROUP

*large capacity
needed at front end
(comm, storage)*

WEEKLY
TREND
ANALYSIS
REPORT
WIRE NOTES
SPECIAL
MEMORANDUM

*configuration
management
to control data
base size*

*production
management
problem*
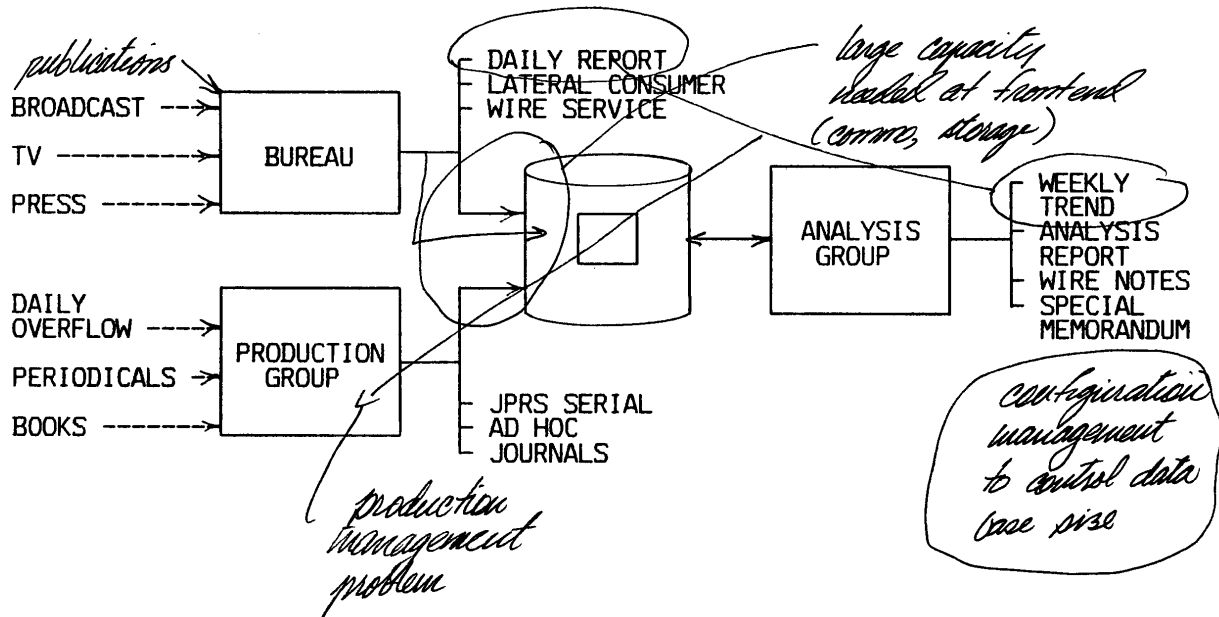
PRODUCTION MANAGEMENT AND CONTROL

LRB ─────────── CONSUMER REQUIREMENTS

SELECTION CRITERIA

BUREAU ─────────── CRUISING FILE

COVERAGE SCHEDULE

LATERAL SERVICES LIST

REFERENCE MATERIAL
↳ *admin functions?*

PRODUCTION ─────── "CSO" FILE
    GROUP

INDEPENDENT CONTRACTOR FILE

SERIALIZATION RECORDS

DISTRIBUTION LISTS

lists "flavor of control"

what about DR? Wire?

PRODUCTION MANAGEMENT (CONT'D)

ANALYSIS ————————— SPECIAL REQUESTS
   GROUP

                            INQUIRES LOG

                            DISTRIBUTION LISTS

MANAGEMENT ——————— STATUS

                            ADMINISTRATIVE SUPPORT

                            QUALITY ASSESSMENT FILES

                            PERFORMANCE EVALUATION

REFERENCE SUPPORT

evaluate which ones should be stored

O   GLOSSARIES

O   DICTIONARIES

O   SPELLING CHECKER

O   CABINET AND DIPLOMATIC LISTS

TRANSITION

TRANSITION REQUIREMENTS

---

acceptance

O   NO IMPACT ON PRODUCTION

O   FULLY FACTORY TESTED AND VERIFIED

O   ASSIMILATED THROUGH SHADOWED OPERATIONS

requires extra staff for parallel operations

HEADQUARTERS   TRANSITION

FACTORY TEST   AND VERIFICATION

PHASE I: O   ESTABLISH DAILY REPORT DATA FLOW THROUGH
                         SHADOWED OPERATIONS

                   O   ESTABLISH PRODUCTION MANAGEMENT SYSTEM FOR
                         PRODUCTION GROUP

PHASE II: O   ESTABLISH PRODUCTION SOURCE MATERIAL DATA BASE

                   O   PROTOTYPE AG "FILING" FUNCTION   *software is not now available for user profiling*

PHASE III: O   INSTALL FULL PRODUCTION MANAGEMENT AND CONTROL

                   O   DEVELOP TRANSLATION SUPPORT

                   O   INSTALL AG TOOLS

BUREAU   TRANSITION

O   FACTORY TEST AND VERIFICATION

monitors, etc. only on site.

O   TEST.DEMONSTRATION.(TRAINING CENTER)

separate. "supermarket" to serve flexible needs of each bureau.

O   ALPHA SITE *(Key West)*

O   BETA1 SITES

O   BETA2 SITES — *"flagship" sites*

determined by tech. support available

O   FULL INSTALLATION

- full-page screen
possible for monitors
- all functions same for
editors

TRAINING

MAJOR INTENSIVE TRAINING AREAS

- supplied by vendors.

O   PUBLICATIONS SUBSYSTEM   _inch DR._

O   SYSTEM MANAGEMENT   _poss train key people for future._
vendor poss. for first 3-mo
O   SYSTEM MAINTENANCE   _for procedures, not tech_

SECURITY

SECURITY REQUIREMENTS

O   FBIS SHALL OPERATE IN A SYSTEM HIGH ENVIRONMENT

O   CLASSIFICATION SHALL RANGE FROM UNCLASSIFIED TO
        SECRET (TBR)

O   DATA AND FILES EXTRACTED FROM THE SYSTEM SHALL
        CONTAIN THE SECURITY CLASSIFICATION

reliability
maintain
service

"...ILITIES" AND OTHERS

RELIABILITY

O   DESIGN PRACTICES (TBD)

O   SIMPLICITY OF CONSTRUCTION (TBD)

O   REDUNDANCY (TBD)

AVAILABILITY

DEFINITION: THE PROBABILITY THAT THOSE FBIS FUNCTIONS
        REQUIRED TO ACCESS AND OUTPUT PRODUCTS AND
        SERVICES ARE IN OPERATING CONDITION AND
        ARE OPERABLE AT ANY INSTANT OF TIME WITH
        THE EXCEPTION OF PLANNED DOWNTIMES.

REQUIREMENT: STEADY STATE AVAILABILITY SHALL BE AT
        LEAST   .98 (TBR)

SINGLE POINT FAILURE

DEFINITION: ANY MALFUNCTION IN EQUIPMENT OR OPERATIONAL
                ERROR THAT WOULD PRECLUDE THE CAPABILITY TO
                MEET THE REQUIREMENTS OF FBIS

REQUIREMENT: NO SINGLE POINT FAILURE IN FBIS SHALL CAUSE
                IRRETRIEVABLE LOSS OR CONTAMINATION OF
                DATA

                cost driver

MAINTAINABLITY

THE FBIS DESIGN SHALL PERMIT TESTING OF SYSTEM EQUIPMENT TO
ESTABLISH OPERATIONAL CAPABILITIES WITHOUT DISRUPTING FBIS
OPERATIONAL TIMELINES

ADDITIONAL AREAS (TBD):

DIAGNOSTIC AIDS

REPAIR VALIDATION

INTERCHANGEABILITY

ACCESSIBILITY

MEAN TIME TO RESTORE

vendor selection criteria

SOFTWARE

THE FBIS SOFTWARE AND DOCUMENTATION SHALL BE DESIGNED AND IMPLEMENTED
IN ACCORDANCE WITH THE PROGRAMMING PRACTICES, STANDARDS, AND
CONVENTIONS OF THE MODERNIZATION PROGRAM.

probably a subscription service for off-the-shelf software.

ENVIRONMENTAL

---

put this in equipment requirements

THE SYSTEM SHALL OPERATE IN THE ENVIRONMENT SPECIFIED IN THE FBIS
FACILITY REQUIREMENTS DOCUMENT FOR BOTH HEADQUARTERS AND THE
INDIVIDUAL BUREAUS

THE SYSTEM SHALL BE DESIGNED AND CONSTRUCTED TO WITHSTAND SERVICE
OUTAGE WITHOUT MECHANICAL OR ELECTRICAL DAMAGE OR DEGRADATION
OF OVERALL PERFORMANCE

LIFETIME

---

requires strong, established vendor who can support changes for new technology

THE ELECTRICAL AND MECHANICAL DESIGN SHALL PROVIDE AN

EXPECTED USEFUL LIFETIME OF 10 (TBR) YEARS AFTER TURNOVER

strong?
TPS 6000?
2
FDS = MIDAS

FBIS CDP REQUIREMENTS REVIEW

Rich Frisbie

3. SYSTEM REQUIREMENTS ANALYSIS

- INTRODUCTION
- SYSTEM WIDE CONSIDERATIONS

- BUREAU

- HQ OPERATIONS GROUP
- HQ ANALYSIS AND PRODUCTION GROUPS

BRIEFING OVERVIEW

O BUREAU OVERVIEW: DEFINITION OF (4) REQUIREMENT AREAS

O COLLECTION REQUIREMENT AREA

O *Monitoring/* TRANSLATION AND EDITING REQUIREMENTS AREA

O COMMUNICATIONS REQUIREMENT AREA

O ADMINISTRATIVE AND TECHNICAL SUPPORT REQUIREMENTS AREA

O MODERNIZATION PHASING

O BUREAUS' SYSTEM-LEVEL REQUIREMENTS

O DERIVED REQUIREMENTS SUMMARY

O RECOMMENDED REQUIREMENTS CHANGES

BUREAU OVERVIEW

O BUREAU BLOCK DIAGRAM

O DEFINITION OF REQUIREMENT AREAS

    — COLLECTION

    — TRANSLATION AND EDITING

    — COMMUNICATIONS

    — ADMINISTRATIVE AND TECHNICAL SUPPORT

```
┌──────────────┐      ┌──────────────┐      ┌──────────────────┐
│  COLLECTION  │─────▶│  MONITORING  │─────▶│  COMMUNICATIONS  │
│              │      │     AND      │      │                  │
│              │      │   EDITING    │      │                  │
└──────────────┘      └──────────────┘      └──────────────────┘
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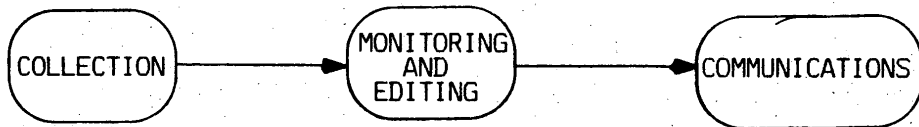
1.2 COLLECTION   1.4 MONITORING   1.9 MESSAGE
1.3 INTERNAL   1.5 SELECT   PROCESSING
     DISTRIBUTION   1.6 TRANSLATION
1.12 CRUISING   1.7 EDIT
                        1.8 DISSEMINATION
                             ASSIGNMENT
                        1.9 PROOFING
                        1.11 TRAINING

```
                  ┌──────────┐
                  │ SUPPORT  │
                  └──────────┘
```

1.13 ADMINISTRATIVE   added
     OPERATIONS
(1.14) MAINTAINENCE

maintenance

O COLLECTION

  - INCLUDES:

    o COLLECTION PERFORMED BY MONITOR OR BOARDMAN
    o CRUISING PERFORMED BY CRUISER

  - EQUIPMENT CURRENTLY CONSISTS OF:

    o ANTENNAS   o SWITCHING EQUIPMENT
    o RECEIVERS   o RECORDERS
    o DEMODULATORS   o TELEPRINTERS
    o LEASED LINES   o FAX
    o REMOTE SITE KITS   o ETC.

O TRANSLATION AND EDITING

  - INCLUDES:

    o MONITORING, [SELECTION], AND TRANSLATION PERFORMED
      BY A MONITOR
    o [SELECTION], EDITING, MESSAGE PREP., ETC PERFORMED
      BY AN EDITOR

  - EQUIPMENT CURRENTLY CONSISTS OF:

    o TAPE PLAYERS   o HEADPHONES
    o TYPEWRITERS   o OFFICE FURNITURE

DEFINITION OF REQUIREMENT AREAS (CONT.)

O COMMUNICATIONS

  - INCLUDES:

    o COMMO PROCESSING PERFORMED BY A TELETYPIST

  - EQUIPMENT CURRENTLY CONSISTS OF:

    o TELETYPEWRITERS   o COMMO EQUIPMENT
    o PAPER TAPE READERS   o ETC.

O ADMINISTRATIVE AND TECHNICAL SUPPORT

  - INCLUDES:

    o ADMINISTRATIVE FUNCTIONS PERFORMED BY BUREAU AND
      DEPUTY CHIEF, ADMIN. ASSTS., AND SECRETARIES
    o BUREAU MAINTAINENACE PERFORMED BY ENGINEERS AND
      TECHNICIANS

  - EQUIPMENT CURRENTLY CONSISTS OF:

    o TYPEWRITERS   o OFFICE FURNITURE
    o ELECTRONIC REPAIR EQUIPMENT (SCOPES, ETC.)

COLLECTION REQUIREMENTS AREA

O ASSUMPTIONS

O RADIO COLLECTION

   - OPERATION AND REQUIREMENTS

      O MAPPING TO SDS-002
      O KEY REQUIREMENTS

   - MODERNIZATION OPPORTUNITIES

O TV COLLECTION
   ...

O PRESS AGENCY WIRE COLLECTION   *more beneficial in this area.*
   ...

O PUBLICATION COLLECTION
   ...

O CRUISING
   ...

COLLECTION AREA: ASSUMPTIONS

O MODERNIZATION OF EXISTING COLLECTION EQUIPMENT IS OUTSIDE THE

   SCOPE OF THIS PROGRAM -- I.E., THE FOLLOWING ARE GFE:

   - RADIO: ANTENNAS, MULTICOUPLERS, RECEIVERS, HEADSETS, RECORDERS

   - TV: ANTENNAS, RECEIVERS, RECORDERS

   - PRESS AGENCY: ANTENNAS, RECEIVERS, DEMODULATORS, TELEPRINTERS,

                    LEASED LINES, FAX

   - REMOTE SITES: REMOTELY-CONTROLLED RECEIVERS, REMOTE KITS

   - FACILITIES: DESKS, CHAIRS, SHELFS, OFFICE SPACE, ETC.

O SOME COLLECTION EQUIPMENT WILL BE/IS BEING UPGRADED BY THE GOVN.:

O ANY COMPUTERIZED CONTROL OF THESE DEVICES DOES FALL WITHIN THE   *INTERNET*

   SCOPE OF THIS PROGRAM

RADIO COLLECTION REQUIREMENTS

O REQUIREMENTS ARE FROM SECTION 2.2.1 OF SDS-002

O KEY REQUIREMENTS

    - MEET COVERAGE SCHEDULE

    - MEET EXPANDED COVERAGE SCHEDULE IN TIMES OF CRISIS

    - SELECT ANTENNA

    - TUNE RECEIVER *how will this be done without tunable receiver*

    - MAINTAIN TUNING THROUGHOUT BROADCAST IN RESPONSE TO DRIFT
       (OR PERHAPS TUNE TO AN ALTERNATE STATION)

    - RECORD BROADCAST

    - LOG RECORDINGS

    - [DISTRIBUTE RECORDINGS TO MONITORS]

O MODERNIZATION OPPORTUNITIES

qual improve.. "nice to have" required

    - AUTOMATED ANTENNA SELECTION/TUNING/   CAT.: II/III
       SIGNAL TRACKING ACCORDING TO COV. SCHEDULE

    - AUTOMATED PROGRAM RECORDING ACCORDING TO   CAT.: II/III
       COVERAGE SCHEDULE

    - LOGGING OF RECORDED PROGRAMS AUTOMATICALLY   CAT.: II
       OR MAINTAINING SOFTCOPY LOG RECORDS

future consideration: digital voice (in 5-10 yrs) use generic recording in making specs.

TV COLLECTION REQUIREMENTS

O REQUIREMENTS ARE FROM SECTION 2.2.3 OF SDS-002

O KEY REQUIREMENTS

  — MEET COVERAGE SCHEDULE

  — MEET EXPANDED COVERAGE SCHEDULE IN TIMES OF CRISIS

  — SELECT ANTENNA

  — SELECT CHANNEL

  — RECORD BROADCAST

  — LOG RECORDINGS

  — [DISTRIBUTE RECORDINGS TO MONITORS]

O MODERNIZATION OPPORTUNITIES

  — AUTOMATED ANTENNA SELECTION/RECEPTION   CAT.: II/III
     ACCORDING TO COVERAGE SCHEDULE

  — AUTOMATED PROGRAM RECORDING ACCORDING TO   CAT.: II/III
     COVERAGE SCHEDULE

  — LOGGING OF RECORDED PROGRAMS AUTOMATICALLY   CAT.: II
     OR MAINTAINING SOFTCOPY LOG RECORDS

PRESS AGENCY COLLECTION REQUIREMENTS

O REQUIREMENTS ARE FROM SECTION 2.2.2 OF SDS-002

O KEY REQUIREMENTS

   - RECEIVE PRESS AGENCY TRANSMISSIONS

   - RECORD TRANSMISSIONS (CURRENTLY VIA TELEPRINTER)

   - MAKE TRANSMISSIONS AVAILABLE FOR SELECTION

      [AND TRANSLATION, IF IN A FOREIGN LANGUAGE]

TELE

— ignores other modernization efforts

is this mature tech.?

                                                                          CAT.

O STAND-ALONE SOFTCOPY TELEPRINTER (ENGLISH OR NON-ENGLISH)

   – RECORD TRANSMISSIONS ON DISK   I

   – LOG TRANSMISSIONS IN A PREVIEW FILE   *how?*   I

   – MARK TRANSMISSIONS OF INTEREST   I

   – ALERT OPERATOR OF RELEVANT OR HIGH PRIORITY   *possibly full text*
      TRANSMISSIONS   *everything at first*

   – PROVIDE SOFTCOPY READING AND SELECTION OF ITEMS   I

   – PRINT SELECTED ITEMS   I

   – OPTIONALLY, PRINT ALL TRANSMITTED ITEMS   I

O ENGLISH TELEPRINTER

   – INDICATE DISSEMINATION LIST FOR SELECTED ITEMS   I

   – DIRECTLY ROUTE SELECTED ITEMS DIGITALLY TO COMM.   I

FOREIGN LANGUAGE TELEPRINTERS

at special "teleprinter" CRT

	CAT.
O REGARDLESS OF ALPHABET, NEED ONE OF THE FOLLOWING:	
— SELECT IN SOFTCOPY AND THEN PRINT FOR TRANSLATION	I
— OR, DIRECTLY ROUTE SELECTED ITEMS DIGITALLY TO MONITORS FOR TRANSLATION	I
— OR, PERMIT DIGITAL RETRIEVAL OF THE TRANSMISSION LOG OR TRANSMITTED ITEMS FROM ANY MONITOR'S TERMINAL	I/II
O PERHAPS USE DIGITAL TRANSMISSION FOR ROMAN ALPHABET, BUT JUST PRINT ON PAPER ITEMS IN OTHER ALPHABETS	

means more info flow in local network

PU̲

O REQUIREMENTS ARE FROM SECTION 2.2.4 OF SDS-002

O KEY REQUIREMENTS

   - LOG RECEIPT OF ISSUES

   - RUN DOWN LATE/MISSING ISSUES

   - DISTRIBUTE TO MONITORS

   - MAINTAIN SUBSCRIPTIONS

O MODERNIZATION OPPORTUNITIES

   - LOG RECEIPT/NOTIFY OF LATE ISSUES   (CAT.: II)

   - MAINTAIN SUBSCRIPTIONS   CAT.: II/III

CRUISING REQUIREMENTS

O REQUIREMENTS ARE FROM SECTION 2.2.4(B) OF SDS-002

O KEY REQUIREMENTS   *periodic revisiting allow this*

   - TUNE AND RECEIVE RADIO STATIONS

   - IDENTIFY STATION AND BROADCAST PARTICULARS

   - RECORD BROADCASTS [FOR EVALUATION BY SOMEONE ELSE
      WITH REQUIRED LANGUAGE CAPABILITY]   *most likely to*

   - KEEP RECORDS OF RECEPTIONS AND BROADCAST CONDITIONS→ *improve*

   - SUPPLY COPIES OF RECORDS TO M.O.D.

O MODERNIZATION OPPORTUNITIES   CAT.

   - AUTOMATED SUPPORT FOR KEEPING OF OBSERVATION RECORDS   II

MONITORING AND EDITING RQMNTS. AREA

O MONITORING & TRANSLATION

 - OPERATION AND REQUIREMENTS

 - MODERNIZATION OPPORTUNITIES

O EDITING

 - OPERATION AND REQUIREMENTS

 - MODERNIZATION OPPORTUNITIES

KEY REQUIREMENTS FOR MONITORS

O REQUIREMENTS MAPPED TO SECTION 2.3 "PROCESSING" OF SDS-002

O BOTH MONITORING AND TRANSLATION REQUIRE THE SAME CAPABILITIES

   TO BE PROVIDED FOR A MONITOR:

   — INITIALIZATION OF AN ITEM

      O SOURCE OF ITEM
      O MONITOR'S NAME
      O TIME OF TRANSLATION

   — TYPING OF TRANSLATED TEXT

   — PROOFING OF TYPED TEXT

   — CORRECTIVE EDIT OF TYPED TEXT

   — TRANSMISSION OF ITEM TO EDITOR

   — ACCESS TO REFERENCE MATERIALS

MODERNIZATION OPPORTUNITIES FOR MONITORS

O MONITORING AND TRANSLATION WORD PROCESSING   CAT.

   (FOR PROGRAM SUMMARIES OR TRANSLATIONS)

   - ITEM INITIALIZATION   I/II

   - TYPING OF TRANSLATED TEXT   I/II

   - PROOFING OF TYPED TEXT   I/II

   - CORRECTIVE EDIT OF TYPED TEXT   I/II

   - TRANSMISSION OF ITEM TO EDITOR   I/II

      o DIGITALLY

      o PRINTING OF TYPED ITEM

O SELECTION

   - ACCESS TO TRANSMISSION LOGS AND ITEMS   I/II

O MISC.

   - ACCESS TO REFERENCE MATERIALS   II/III

KEY REQUIREMENTS FOR EDITORS

O REQUIREMENTS MAPPED TO SECTION 2.3 "PROCESSING" OF SDS-002

O KEY REQUIREMENTS

- SELECTION OF NEXT ITEM TO EDIT

- READING OF TRANSLATED ITEM

- EDITS/REWRITES OF TRANSLATED ITEMS

- TRACKING OF ALL EDITORIAL REVISIONS

- IDENTIFY DISTRIBUTION LIST FOR ITEM

- IDENTIFY MESSAGE PRIORITY

- TRANSMISSION OF EDITED ITEMS TO COMM.

- PROVIDE COMMENTS/FEEDBACK ON TRANSLATION QUALITY

- ACCESS REFERENCE MATERIALS

clarified require

MODERNIZATION OPPORTUNITIES FOR EDITORS

	CAT.
O EDITING WORD PROCESSING	
— SELECTION OF NEXT ITEM TO EDIT	I/II
— READING OF TRANSLATED ITEM	I/II
— EDITS/REWRITES OF TRANSLATED ITEMS	I/II
— TRACKING OF ALL EDITORIAL REVISIONS	I/II
O MESSAGE DISTRIBUTION	
— IDENTIFY DISTRIBUTION LIST FOR ITEM	I/II
— IDENTIFY MESSAGE PRIORITY	I/II
— TRANSMISSION OF EDITED ITEMS TO COMM.	I/II
O DIGITAL, OR O PRINTED	
O MISC.	
— PROVIDE COMMENTS/FEEDBACK ON TRANSLATION QUALITY	II
— ACCESS REFERENCE MATERIALS	II

COMMUNICATIONS REQUIREMENT AREA

O ASSUMPTIONS

O OPERATION AND REQUIREMENTS

   - TRANSMISSION

   - RECEPTION

O MODERNIZATION OPPORTUNITIES

COMMUNICATIONS AREA: ASSUMPTIONS

O Study of the Communications Facilities Proper (e.g., Capacity,
   Reliability, Lifetime, etc.) and Their Modernization is
   Outside the Scope of this Program

O This Modernization Effort is Responsible for:
   - Upgrading or Modification of Communications Facilities
      Necessary to Support Other Bureau Modernization Objectives
   - Any Computerized Control of Communication Equipment
   - Modernization of Operator-Related Equipment

O Modernization of Headquarters Comm. Function is Discussed
   Later by Dave Best

O   REQUIREMENTS ARE FROM SECTIONS 2.4 AND 2.6 OF SDS-002

O   TRANSMISSION

    —   RECEIVE EDITED ITEMS FROM EDITORS

    —   PREPARE AND FORMAT ITEMS FOR TRANSMISSION

    —   TRANSMIT MESSAGE

O   RECEPTION

    —   RECEIVE TRANSMITTED ITEMS FROM COMM. NETWORK

    —   DELIVER ITEMS TO PROPER USERS

O TRANSMISSION   CAT.

  — RECEIVE EDITED ITEMS DIGITALLY   I

  — PREPARE ROUTING INFORMATION FROM   I
     EDITOR'S CODE

  — PREPARE PRECEDENCE INSTRUCTIONS FROM   I
     EDITOR'S NOTES   *shipping instructions for any various*

  — FORMAT ITEM BY (NETWORK PROTOCOLS) *comm. network.*   I

  — TRANSMIT ITEM OVER SELECTED COMM. NETWORK   I

  — RETAIN COPY OF TRANSMITTED MESSAGE   II

O RECEPTION

  — ALERT OPERATOR TO INCOMING MESSAGE   II

  — RETAIN COPY OF RECEIVED MESSAGE   II

  — AUTOMATED ROUTING OF MESSAGES   II/III

SUPPORT REQUIREMENTS AREA

O ADMINSTRATION

- OPERATION AND REQUIREMENTS

- MODERNIZATION OPPORTUNITIES

O TECHNICAL

- OPERATION AND REQUIREMENTS

- MODERNIZATION OPPORTUNITIES

ADMIN: REQUIREMENTS _OPPORTUNITIES

---

not in FBIS reg.

no need for spec software. →

O <u>ALL DERIVED REQUIREMENTS</u>

O KEY REQUIREMENTS

    — PAYROLL

    — CAPITAL EQUIPMENT MANAGEMENT

    — PURCHASING

O MODERNIZATION OPPORTUNITIES   CAT.

    — SPREADSHEET   I/II

    — WORD PROCESSOR   I/II

    — ELECTRONIC RECORD KEEPING   I/II

TECH. REQUIREMENTS _OPPORTUNITIES

O ALL DERIVED REQUIREMENTS

O KEY REQUIREMENTS ~ *Equipment*

- EQUIPMENT MAINTAINENCE

- PARTS INVENTORY MANAGEMENT

2 (- ANTENNA DESIGN)

O MODERNIZATION OPPORTUNITIES   CAT.

- ELECTRONIC RECORD KEEPING   I/II

- WORD PROCESSING   II

- PREVENTIVE MAINTENANCE SCHEDULING   II/III

MODERNIZATION PHASING: MINIMAL STEPS

INCREMENTAL MODERNIZATION OF BUREAUS SHOULD PROCEED IN
LOGICAL ORDER:

customise each bureau

1. UPGRADE COMMUNICATIONS TELETYPES/PAPER TAPE TO COMPUTER
   TERMINALS AND INTERFACE TERMINALS TO COMM. NETWORKS

2. CONVERT ~~WIRE SERVICE~~ *Press agency* (ENGLISH LANGUAGE) TELEPRINTERS TO
   (STAND ALONE) TERMINALS WITH ONLINE STORAGE AND PRINTERS

3. INTEGRATE (WIRE SERVICE) TERMINALS TO COMM. TERMINALS AND
   PERMIT SELECTION/DISSEMINATION TO BE DONE IN SOFTCOPY

4. REPLACE MONITORS' TYPEWRITERS WITH COMPUTER TERMINALS WITH
   PRINTERS AND INTEGRATE WITH COMM. TERMINALS

5. PROVIDE EDITORS WITH EDITING TERMINALS AND INTEGRATE TO
   MONITORS' AND COMM. TERMINALS; [STAND ALONE INTERMEDIATE
   UPGRADE POSSIBLE]

note: this puts any comms slot reduction pretty far into the shed, so slot requests must be over existing I/O.

6. CONVERT (WIRE SERVICE) (FOREIGN LANGUAGE) TELEPRINTERS TO
   COMPUTER TERMINALS WITH ONLINE STORAGE AND PRINTERS
   [DISPLAY ONLY CAPABILITY; NOT INTEGRATED WITH OTHER TERMINALS]

7. INTEGRATE FOREIGN LANGUAGE (WIRE SERVICE) TO MONITOR'S TEMINALS

8. PROVIDE COMPUTER TERMINALS (STAND ALONE) WITH OFF-THE-SHELF
   OFFICE SOFTWARE TO ADMINISTRATIVE PERSONNEL

9. PROVIDE COMPUTER TERMINALS (STAND ALONE) WITH OFF-THE-SHELF
   OFFICE SOFTWARE TO ENGINEERS/TECHNICIANS

dump stand alones

10. INTEGRATE ADMINISTRATIVE TERMINALS WITH REST OF NETWORK

11. INTEGRATE TECHNICIANS TERMINALS WITH REST OF NETWORK

INCREMENTAL PHASING

O THE PHASING POSSIBILITIES HELP DEFINE POSSIBLE DESIGN MODULES

O MODULAR DESIGN ALLOWS EACH BUREAU TO MODERNIZE JUST ITS NEEDS

O SOME VARIATIONS IN ORDER ARE POSSIBLE: CONVERT WIRE SERVICE
   TELETYPES TO SOFTCOPY AFTER MONITORS & EDITORS HAVE TERMINALS

O SUBSTANTIAL INCREMENTAL CHANGES ARE PREFERABLE; PERHAPS
   COMBINE INCREMENTAL MODERNIZATIONS INTO THREE INSTALLMENTS:
   - REPLACE COMM. + WIRE SERVICE TELETYPES WITH TERMINALS
   - INSTALL & INTEGRATE MONITOR AND EDITOR TERMINALS
   - INSTALL & INTEGRATE ADMIN. & TECHNICIANS TERMINALS

O TIMING OF INCREMENTS DEPENDS ON EXTERNAL FACTORS:
   - NETWORK DESIGN
   - RATE AT WHICH BUREAUS CAN ACCOMODATE CHANGES
   - FUNDING PROFILE

BUREAUS' SYSTEM-LEVEL REQUIREMENTS

O DESIGN REQS.

   - AVAILABILITY

   - POWER, SPACE, AC CONSTRAINTS

O SYSTEM MANAGEMENT REQS.

   - EQUIPMENT MANAGEMENT

we have to add up total bureau req's.

AVAILABILITY

O SINGLE POINT OF FAILURE: FAILURE OF ANY SINGLE PIECE OF
   EQUIPMENT SHOULD NOT PROHIBIT THE CONTINUED OPERATION
   OF ALL OTHER EQUIPMENT IN A BUREAU'S NETWORK

O REDUNDANT CAPABILITY: FAILURE OF A SINGLE PIECE OF
   EQUIPMENT SHOULD NOT RESULT IN THE LOSS OF AN
   OPERATIONALLY-REQUIRED SOFTCOPY CAPABILITY

O HARDCOPY BACKUP: IN THE EVENT OF MULTIPLE EQUIPMENT
   FAILURES, THE NETWORK MUST PROVIDE THE HARDCOPY SUPPORT
   NEEDED TO REPLACE LOST CAPABILITIES OR CAPACITY (I.E.,
   PRINT OUT MONITOR'S TYPED COPY FOR EDITORS)

O NETWORK AVAILABILITY: ALL CAPABILITIES NEEDED TO PERFORM
   MAINLINE BUREAU OPERATIONS MUST BE AVAILABLE IN SOFTCOPY
   98% (TBR) OF THE BUREAU'S SCHEDULED COVERAGE HOURS

O RELIABILITY, MAINTAINABILITY: COVERED EARLIER BY RON

parallels existing figures

FACILITIES DESIGN REQUIREMENTS

O POWER

- NETWORK DESIGN MUST OPERATE USING LOCALLY-AVAILABLE POWER
  [CONVERSION TO A STANDARD OR MULTI-VOLTAGE EQUIPMENT IS
  ALLOWABLE; DESIGNS MUST NOT REQUIRE NEW POWER SOURCES]

O SPACE

- NETWORK DESIGN MUST NOT REQUIRE USE OF LARGE AMOUNTS OF
  FLOOR SPACE [BUREAUS HAVE SPACE CONSTRAINTS]

O AIR CONDITIONING

- NETWORK DESIGN MUST NOT REQUIRE EXCESSIVE COOLING

SYSTEM MANAGEMENT REQUIREMENTS

O SYSTEM ACCESS

- ACCESS TO THE NETWORK SHOULD BE RESTRICTED TO AUTHORIZED USERS ONLY

- IT SHOULD BE POSSIBLE TO CONTROL ACCESS TO INDIVIDUAL FILES TO AUTHORIZED USERS

O RESOURCE MANAGEMENT

- THE CAPABILITY TO CREATE BACKUP COPIES OF THE SYSTEM MUST BE PROVIDED

- IT MUST BE POSSIBLE FOR THE SYSTEM MANAGER TO MANAGE ONLINE DATA STORAGE -- ARCHIVE OR PURGE OLD ITEMS

- THE SYSTEM MANAGER MUST BE ABLE TO MAINTAIN THE CONTENT AND CURRENCY OF ONLINE REFERENCE MATERIALS

why have a manager?

O CONFIGURATION MANAGEMENT

- THE SYSTEM MANAGER MUST BE ABLE TO MANAGE THE NETWORK CONFIGURATION

DERIVED REQUIREMENTS SUMMARY

O NEED ABILITY TO PRINT OUT DATA AT ANY POINT IN PROCESSING

O IT SHOULD BE A DESIGN DECISION HOW TO HANDLE THE PRESS AGENCY WIRE SERVICES -- JUST SPECIFY FUNCTIONAL REQUIREMENTS

O A REDUNDANT DESIGN IS NEEDED (BOTH DIGITAL AND HARDCOPY BACKUP PLANS) TO ENSURE BUREAUS CAN DO THEIR JOBS

O NEED TO ADD SYSTEM MANAGEMENT FUNCTIONS

O NEED TO ADD DESIGN REQUIREMENTS

O OTHERS, AS NOTED EARLIER

RECOMMENDED REQUIREMENTS CHANGES

O BOLSTER STATEMENTS OF FUNCTIONAL REQUIREMENTS

O REPLACE AUTOMATED RADIO/TV RECEPTION/RECORDING WITH
   A GENERAL REQUIREMENT TO PROVIDE A FLEXIBLE DESIGN
   THAT CAN ACCOMODATE SPECIAL MODERNIZATION REQUIREMENTS
   OF INDIVIDUAL BUREAUS; OR FURTHER, FUTURE MODERNIZATION

FBIS CDP REQUIREMENTS REVIEW

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3. SYSTEM REQUIREMENTS ANALYSIS

- INTRODUCTION
- SYSTEM WIDE CONSIDERATIONS
- BUREAU

- HQ OPERATIONS GROUP

- HQ ANALYSIS AND PRODUCTION GROUPS

SIMPLIFIED FLOW FOR
FBIS OPERATIONS GROUP

FBIS
HEADQUARTERS

these guys
correctly have all
messages going
thru wire

FBIS HEADQUARTERS MESSAGES

DATA BASE

OPERATIONS
GROUP

SERVICES

MESSAGE
HANDLING

BUREAUS

MESSAGE PROCESSING

WIRE
CONSUMERS

MESSAGES

EDIT

MESSAGES

ALERTS

MESSAGE
TRAFFIC

SOURCE
MATERIAL
& MESSAGES

DAILY REPORT PROCESSING

PUBLISHED
DAILY
REPORTS

EDIT/PRODUCTION

ALERTS

MESSAGES

COMMUNI-
CATION

FUNCTIONAL SEGMENTS

not necessarily or
centralized
monolythic
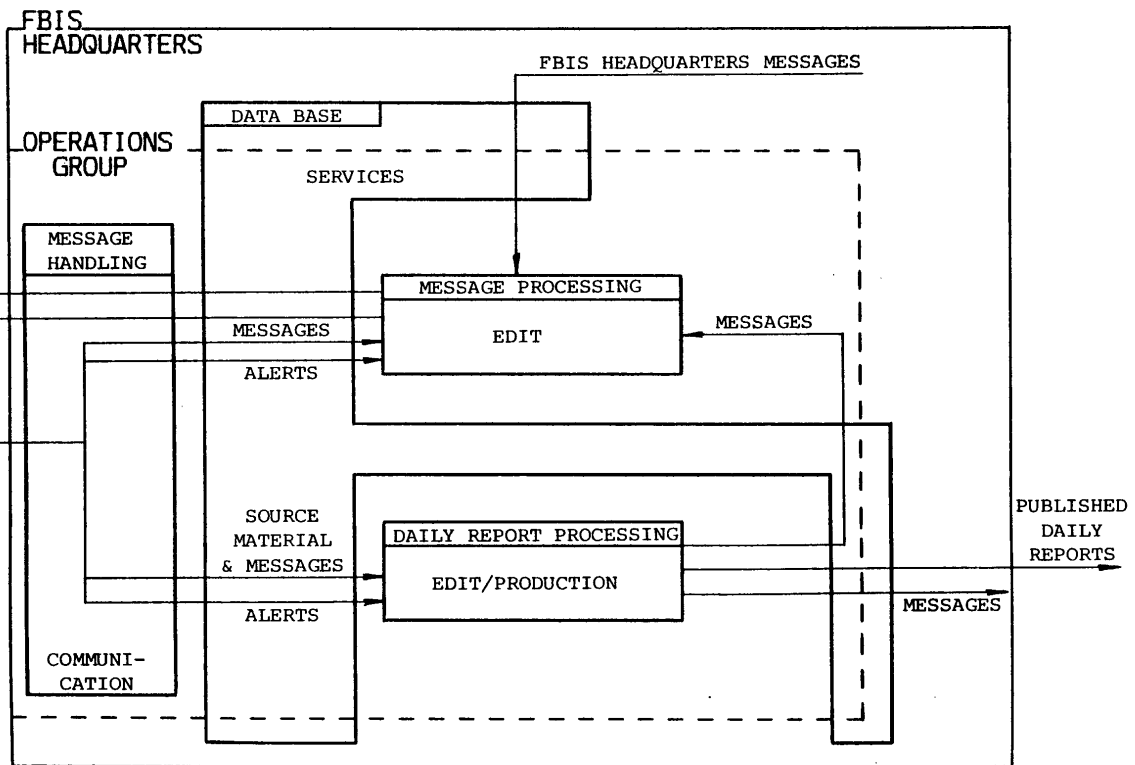
O COMMUNICATION
  - WIRE SERVICE MESSAGE HANDLING INPUT/OUTPUT

O DATA BASE SERVICES

O EDIT
  - WIRE SERVICE MESSAGE PROCESSING
  - DAILY REPORT EDITING

O PRODUCTION
  - DAILY REPORT COMPOSITION

WIRE SERVICE

MESSAGE HANDLING

INPUT/OUTPUT

WIRE SERVICE MESSAGE HANDLING I/O

MODERNIZATION REQUIREMENTS

O CAPACITY
  - CURRENT VOLUME *(including crisis peaks)*
  - REQUIRED GROWTH MARGIN

O RELIABILITY
  - REDUNDANT/FAULT-TOLERANT
  - STANDARD AND PROVEN

std, proven w. good support

O AUTOMATED INPUT PROCESSING
  - VALIDATION
  - RETRANSMISSION REQUESTS *< option*
  - DISSEMINATION
  - ALERTS
  - STORAGE

O AUTOMATED OUTPUT PROCESSING
  - QUEUE-DRIVEN
  - QUEUE REVISION
  - FORMATTING
  - LOGGING
  - INTERRUPTS

(WIRE SERVICE) MESSAGE HANDLING I/O

REQUIREMENTS LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O CAPACITY	I
O RELIABILITY	I
O AUTOMATED INPUT PROCESSING	I
O AUTOMATED OUTPUT PROCESSING	I

WIRE SERVICE MESSAGE HANDLING I/O

SUMMARY OF NEW/MISSING REQUIREMENTS

O CAPACITY
   - REQUIRED GROWTH MARGIN

O RELIABILITY
   - REDUNDANT/FAULT-TOLERANT
   - STANDARD AND PROVEN
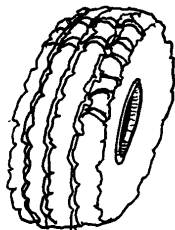
DATA BASE SERVICES

DATA BASE SERVICES

MODERNIZATION REQUIREMENTS

O FILE GENERATION/UPDATE
- PRODUCT FILES
  : ~~ENGLISH~~ TEXT
  : GRAPHICS
  : NUMERIC DATA
- RELATIONS
- CONDITIONAL UPDATE
- EDIT TRACE
- OPERATIONAL SUPPORT FILES
  : QUERIES
  : FORMATS
  : MENUS
  : FORMS

File type

O FILE SEARCH/RETRIEVAL
- ~~SELECTIVE~~
- PREDEFINED QUERIES
- SORT

allows batch processing

O FILE DISPLAY
- SIMULTANEOUS
- FORMATS
- HARDCOPY

DATA BASE SERVICES

MODERNIZATION REQUIREMENTS

O CAPACITY
    - ON-LINE < *large*
    - ARCHIVE
    - REQUIRED GROWTH MARGIN

O EASE OF USE
    - HELP
    - MENUS
    - FORMS
    - REFERENCES

O ELECTRONIC MAIL
    - HEADQUARTERS COMMUNICATIONS

O REPORT GENERATION
    - CALCULATIONS

O FILE PURGE
    - IDENTIFICATION
    - APPROVAL

non-cleared access? non-FBIS?

II.) incorporating all prior data bases.

DATA BASE SERVICES

REQUIREMENTS LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O FILE GENERATION/UPDATE	I
O FILE SEARCH/RETRIEVAL	I
O FILE DISPLAY	I
O CAPACITY	I
O EASE OF USE	I
O ELECTRONIC MAIL	II
O REPORT GENERATION	I
O FILE PURGE	II

DATA BASE SERVICES

SUMMARY OF NEW/MISSING REQUIREMENTS

O FILE GENERATION/UPDATE
- OPERATIONAL SUPPORT FILES
  : MENUS
  : FORMS

*requirement ?
or software design ?*

O CAPACITY
- REQUIRED GROWTH MARGIN

O EASE OF USE
- MENUS
- FORMS

O FILE PURGE
- IDENTIFICATION
- APPROVAL

WIRE SERVICE

MESSAGE PROCESSING

WIRE SERVICE MESSAGE PROCESSING

MODERNIZATION REQUIREMENTS

O EDIT
    - Text
    - Functional capabilities
    - Ease of use ✗ *single key command*

user programmable

O MESSAGE PRODUCTION
    - User interface ✗ *header addition*
    - Help
    - Error processing
    - Addressing ——— *coding not needed*
    - Formatting
    - Announcements
    - Correlation
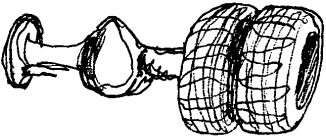
WIRE SERVICE MESSAGE PROCESSING

REQUIREMENTS LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O EDIT	I
O MESSAGE PRODUCTION	I

WIRE SERVICE MESSAGE PROCESSING

SUMMARY OF NEW/MISSING REQUIREMENTS

O EDIT
    - EASE OF USE

O MESSAGE PRODUCTION   *forms*
    - USER INTERFACE
    - ANNOUNCEMENTS   *automatic (60-mm periodic notices) — II*
    - CORRELATION

    auto composition of multi-take

DAILY REPORT EDITING

DAILY   REPORT   EDITING

MODERNIZATION REQUIREMENTS

O FUNCTIONALITY
- WORD PROCESSING
- GRAPHICS
- EASE OF USE

look at it, but its a II future growth

O EDIT SUPPORT
- SPELLING CHECKING
- SYNTACTICAL CHECKING
- ON-LINE REFERENCES

also to wire

O QUALITY
- EDIT TRACE

DAILY REPORT EDITING

REQUIREMENTS LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O FUNCTIONALITY	I
O EDIT SUPPORT	II
O QUALITY	I

DAILY REPORT EDITING

SUMMARY OF NEW/MISSING REQUIREMENTS

O FUNCTIONALITY
- EASE OF USE

DAILY REPORT COMPOSITION

DAILY REPORT COMPOSITION

MODERNIZATION REQUIREMENTS

O REPORT CONTENT
  - TEXT
  - GRAPHICS

O TYPOGRAPHY
  - CODING
  - QUALITY

O HYPHENATION
  - RULES
  - DICTIONARY (CUSTOMIZE)

O JUSTIFICATION

O PAGINATION
  - FUNCTIONAL CAPABILITIES
  - INTERACTIVE

O PROOF
  - DISPLAY   *before photo preparation*

O OUTPUT
  - FORMAT

- software must have accommodate beginning and experienced operators

DAILY REPORT COMPOSITION

REQUIREMENTS LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O REPORT CONTENT	I
O TYPOGRAPHY	I
O HYPHENATION	II
O JUSTIFICATION	I
O PAGINATION	I
O PROOF	I
O OUTPUT	I

DAILY REPORT COMPOSITION

SUMMARY OF NEW/MISSING REQUIREMENTS

O HYPHENATION
    - DICTIONARY (CUSTOMIZE)

O PROOF
    - DISPLAY

ENGINEERING DIVISION

AND

MONITORING OPERATIONS DIVISION

ENGINEERING DIVISION ACTIVITIES

O PLANNING FOR FACILITIES/INSTALLATIONS

O SURVEYS/EVALUATIONS OF MONITORING SITES

O ENGINEERING AND TECHNICAL SUPPORT

O COORDINATION OF EQUIPMENT PROCUREMENT

O TEST/EVALUATION OF EQUIPMENT

MONITORING OPS DIVISION ACTIVITIES

O COORDINATE ALLOCATION OF COVERAGE RESPONSIBILITIES

O PLANNING OF FIELD RECEPTION SURVEYS

O ANALYSIS OF MONITORING ACTIVITY

O DIRECTION OF CRUISING

O RESEARCH/DISSEMINATION OF BROADCAST MEDIA DATA

ENGINEERING & MONITORING OPS DIVISIONS

SUMMARY OF MODERNIZATION REQUIREMENTS/LEVEL OF IMPORTANCE

MODERNIZATION REQUIREMENT	LEVEL OF IMPORTANCE
O DATA BASE SERVICES	II
- FILE GENERATION/UPDATE	
- FILE SEARCH/RETRIEVAL	
- FILE DISPLAY	
- CAPACITY	
- EASE OF USE	
- ELECTRONIC MAIL	
- REPORT GENERATION	
- FILE PURGE	
O EDIT	II
- FUNCTIONAL CAPABILITIES	
- EDIT SUPPORT	

OPERATIONS GROUP REQUIREMENTS ISSUES

O DIRECT ACCESS TO SOFTCOPY VERSION OF DAILY REPORT
    BY SELECTED WIRE CONSUMERS IN ADVANCE OF
    HARDCOPY PUBLICATION

O COLLECTION AND DISSEMINATION OF VIDEO SOURCE MATERIAL

O WIRE SERVICE DISSEMINATION OF GRAPHICS MATERIAL TO
    WIRE CONSUMERS

FBIS CDP REQUIREMENTS REVIEW

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3. SYSTEM REQUIREMENTS ANALYSIS

- INTRODUCTION
- SYSTEM WIDE CONSIDERATIONS
- BUREAU
- HQ OPERATIONS GROUP

- HQ ANALYSIS AND PRODUCTION GROUPS

— who is responsible for MIDAS Upgrade RFPs?
• add CPU to Upgrade, which now incorporates only TPU.

— cost/benefits/risks: design to requirements, w. risk a factor and cost expressed.
Less interest in cost than in risk, at this point.

PRODUCTION GROUP

SIMPLIFIED DATA FLOW: PRODUCTION GROUP

```
                        TSS/              CSO      IC
                         CTS             FILE     FILE


 AD HOC  ────────►   ┌──────────┐    ┌──────────┐    ┌──────────┐
                     │ o SCAN   │    │ o MANAGE │    │ o PRODUCE│
 FOREIGN             │          │───►│   IC     │───►│  COMPILED│
 SUBSCRIPTION ─────► │ o SELECT │    │   ACTIVITY│   │  REPORT  │
                     │          │    │          │    │          │
 DAILY               │ o EVALUATE│   │          │    │          │
 OVERFLOW ─────────► └──────────┘    └──────────┘    └──────────┘
                          ▲        MATERIAL │  ▲ TRANSLATION

                     COMMUNITY          ┌──────────┐
                     REQUIREMENTS       │    IC    │
                                        └──────────┘
                                             ▲
                                    TRANSLATION AIDS
```
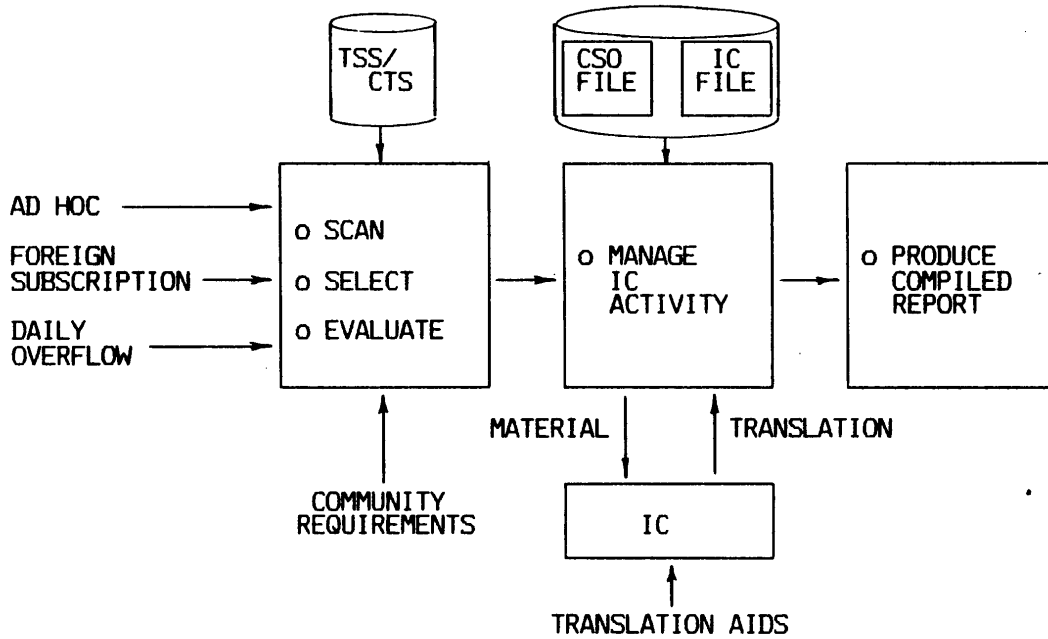
this function should stay manual

SCAN   SELECT   EVALUATE

O   REVIEW AND ROUTE DAILY REPORT OVERFLOW

O   REFERENCE LRB REQUIREMENTS   } *automated functions*

O   ASSIGN AND FORWARD COPY
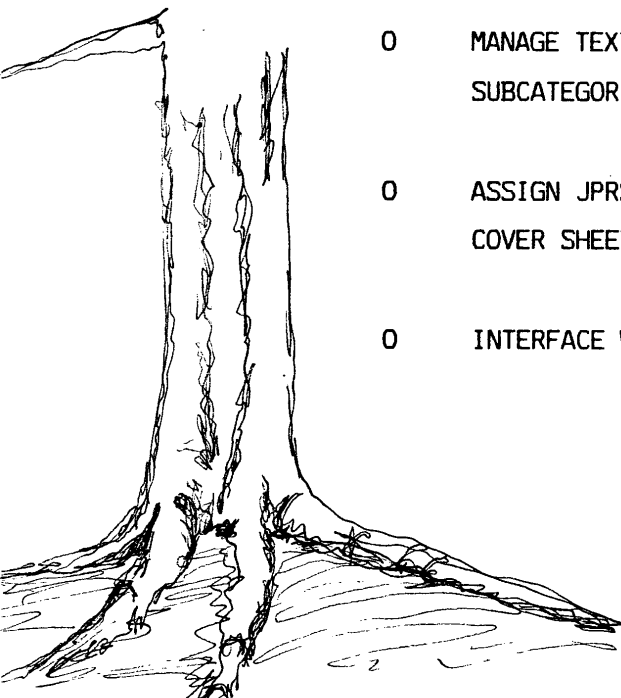
O   *translation support*
    —glossaries in foreign languages (1200

MANAGE INDEPENDENT CONTRACTORS

O   ENTER "CSO" FILE

O   MAINTAIN JOB STATUS IN CSO FILE

O   ENTER "IC" FILE

O   RELATE CSO FILE AND IC FILE

O   GENERATE APPROPRIATE REPORTS
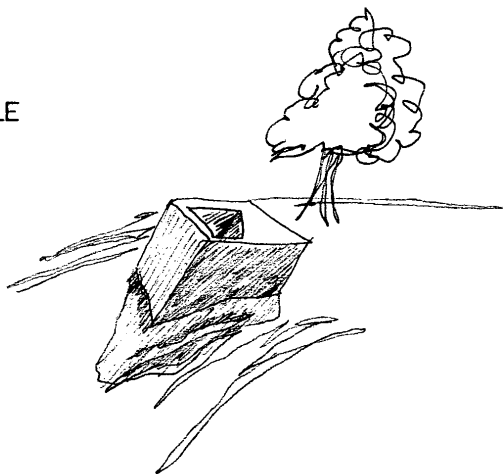
PROCESS TEXT

O   MANAGE TEXT FILE BY GEOGRAPHIC AREA AND OTHER
     SUBCATEGORIES (TBD)

O   ASSIGN JPRS SERIALIZATION NUMBER AND OTHER
     COVER SHEET DATA

O   INTERFACE WITH P&PD

MODERNIZATION OPPORTUNITIES

	LEVEL OF IMPORTANCE
ESTABLISH A "CSO" FILE AND SUPPORT STATUS UPDATE AND QUERY	I
ESTABLISH AND MAINTAIN "IC" FILE	I
ESTABLISH LRB REQUIREMENTS FILE	II
PROVIDE TRANSLATION AIDS	II

have same access to data base, create own files

storage is not the problem (10^9 is small in Mbytes) — access and retrieval is.

high risk, but could improve translation quality

NEW REQUIREMENTS

PROVIDE FORMS ENTRY INTO THE DATA BASE

ANALYSIS GROUP

SIMPLIFIED DATA FLOW:
ANALYSIS GROUP
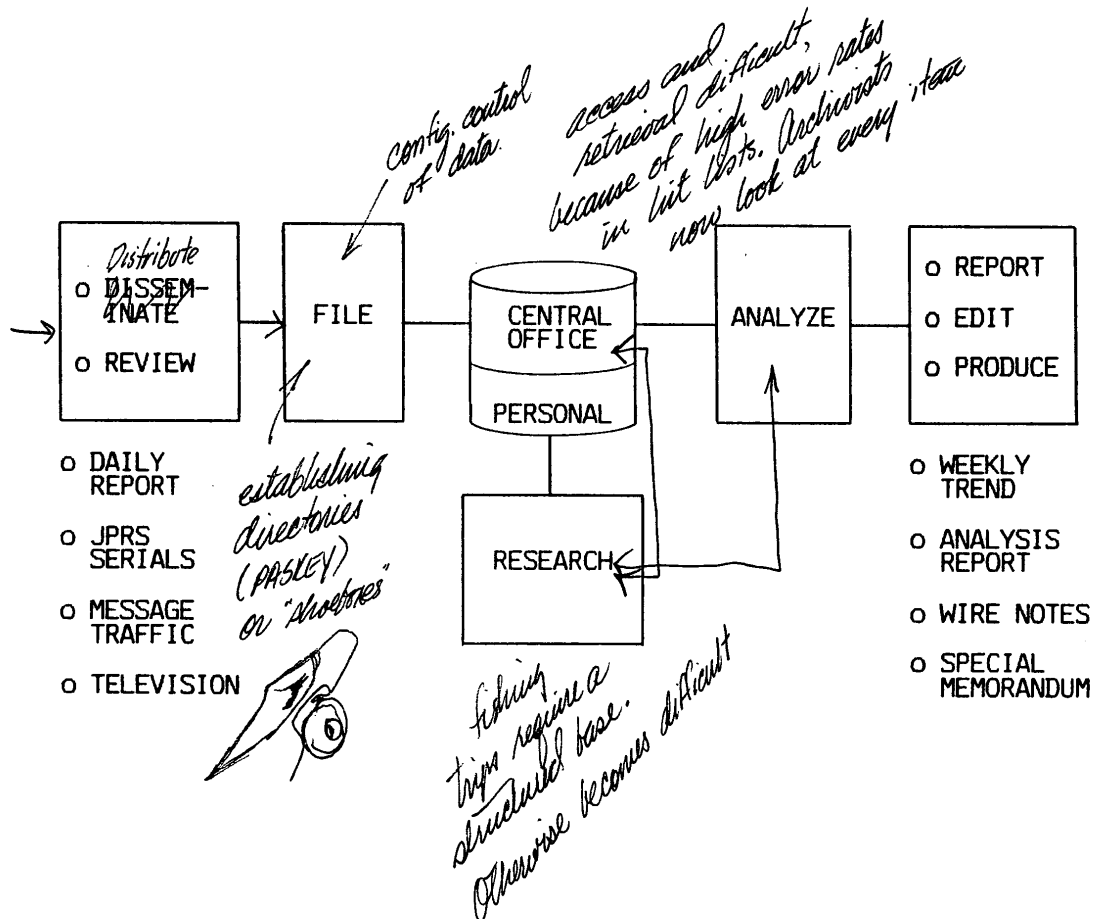
o DISSEM-
  INATE
o REVIEW

o DAILY
  REPORT

o JPRS
  SERIALS

o MESSAGE
  TRAFFIC

o TELEVISION

FILE

CENTRAL
OFFICE

PERSONAL

RESEARCH

ANALYZE

o REPORT
o EDIT
o PRODUCE

o WEEKLY
  TREND

o ANALYSIS
  REPORT

o WIRE NOTES

o SPECIAL
  MEMORANDUM

DISSEMINATE   REVIEW   FILE

O   FORWARD MESSAGE TRAFFIC

O   RECEIVE MESSAGE TRAFFIC

O   REVIEW MESSAGE TRAFFIC

O   STORE PRODUCT SOURCE DATA

O   UPDATE AUTOMATICALLY USER DIRECTORIES AND INDICES

RESEARCH DATA

O   SUPPORT FLEXIBLE DATA RETRIEVAL THROUGH MULTIPLE
     SEARCH CAPABILITIES

O   CREATE TEMPORARY USER "HIT" FILES

ANALYZE AND PRODUCE REPORTS

O   GENERATE REPORTS BASED ON USER "HIT" FILES

O   FORWARD REPORT FOR EDIT AND REVIEW

O   SUPPORT LOW VOLUME REPRODUCTION

MODERNIZATION OPPORTUNITIES

	LEVEL OF IMPORTANCE
ESTABLISH CENTRAL DATA BASE FOR PRODUCT SOURCE MATERIAL	I
PROVIDE SELECTIVE SEARCH CAPABLILITIES	I
IMPLEMENT RESEARCH TOOLS	II

NEW REQUIREMENTS

PROVIDE THE CAPABILITY TO (PURGE) FILES OR GROUPS OF FILES

archive

LAISON AND REQUIREMENTS BRANCH

SIMPLIFIED DATA FLOW: LRB

PRODUCT
EVALUATION

o REVIEW/	DISTRIBUTION CONTROL
EVALUATE	o LATERAL SERVICES
	o DISTRIBUTION LISTS

CONSUMER
REQUESTS

o COORDINATE	FBIS REPORTS
	o ANALYSIS
	o JPRS
	SERIALIZATION

PROJECT
FEASIBILITY

/ remains function
human
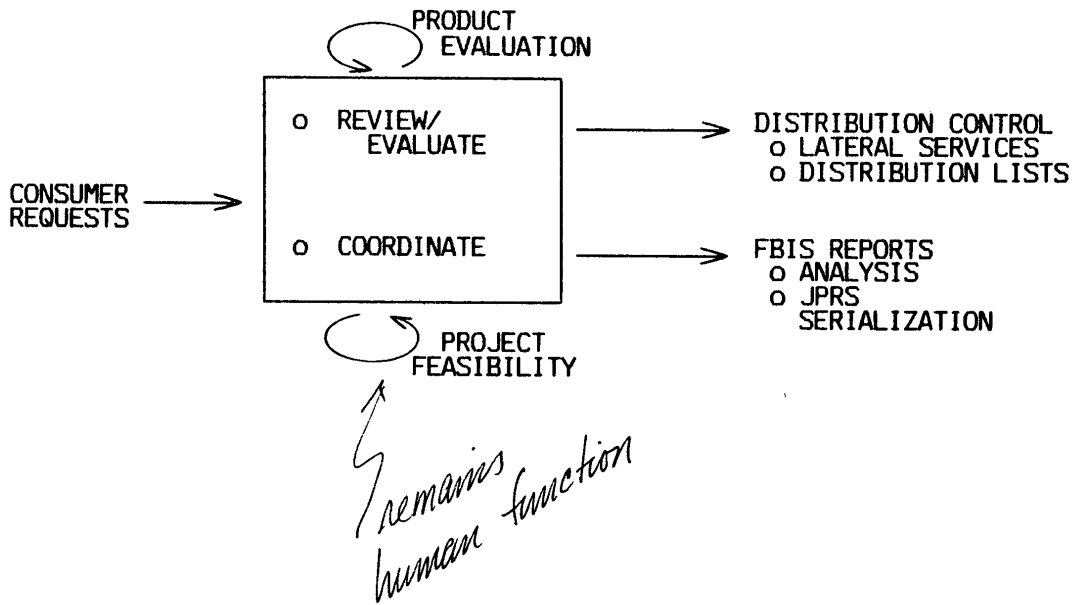
REVIEW   EVALUATE   COORDINATE

O   COORDINATE FBIS COMPONENT ACTIVITY

O   COMMUNICATE REQUESTOR REQUIREMENTS

O   MAINTAIN DISTRIBUTION CONTROL

MODERNIZATION OPPORTUNITIES

	LEVEL OF IMPORTANCE
ESTABLISH AND MAINTAIN DISTRIBUTION CONTROL LISTS	I
DISTRIBUTE CONSUMER REQUIREMENTS THROUGH SPECIFICATION FILES	II

NEW REQUIREMENTS

NONE

REFERENCE SERVICE

SIMPLIFIED DATA FLOW:
REFERENCE SERVICE

BUREAU REQUEST ⟶

CABLE ⟶

[DISSEMINATE ACQUIRE COMPILE]

⟶ REFERENCE HARDCOPY

⟶ DIPLOMATIC LISTS CABINET
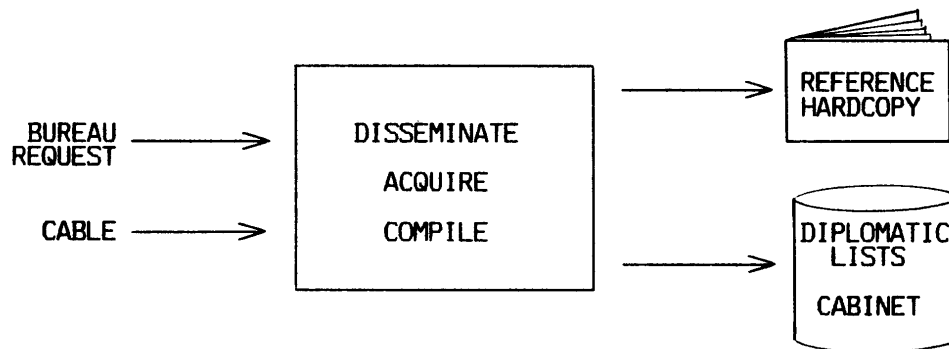
DISSEMINATE   ACQUIRE   COMPILE

O   RECEIVE SUPPORT REQUESTS FROM FBIS COMPONENTS

O   PROVIDE SUPPORT MATERIAL TO THE FBIS COMPONENTS

O   MAINTAIN DIPLOMATIC AND OFFICIALS LIST

O   FORWARD LIST UPDATES TO THE BUREAU

MODERNIZATION OPPORTUNITIES

I	LEVEL OF IMPORTANCE
MAINTAIN DIPLOMATIC AND OFFICIALS LISTS	I
FORWARD LISTS TO THE BUREAU	II

NEW REQUIREMENTS

O   PROVIDE FORMS ENTRY INTO THE DATA BASE

O   PROVIDE THE CAPABILITY TO PURGE FILES OR GROUPS
    OF FILES

FBIS CDP REQUIREMENTS REVIEW

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4. REQUIREMENTS ISSUES SUMMARY

FBIS REQUIREMENTS ISSUES SUMMARY

O REWRITE OF SDS-002

- ONE REQUIREMENT PER NUMBERED PARAGRAPH
- ISOLATE BACKGROUND, COMMENTARY, SPECULATION, ASSUMPTIONS *in appendix?*
- WRITE FUNCTIONAL REQUIREMENTS FROM USER'S VIEW
- DEFINE OR REMOVE TBD's *rather than design*

O SPECIFY STUDY BOUNDARIES

O USE RFC'S AND BRIEFINGS AS REWRITE GUIDE

FBIS CDP REQUIREMENTS REVIEW

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5. RFC'S

FBIS CDP REQUIREMENTS REVIEW

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6. PLANS FOR PHASE II

FBIS CDP
PHASE II SCHEDULE

	AUGUST			SEPTEMBER			
	13	20	27	03	10	17	24
WEEK	6	7	8	9	10	11	12

OPS CONCEPT.......... |--------|- ——————————————————————————————►

TECH SURVEY.......... | | Δ————————————————Δ |

RECEIVE FINAL
   REQUIREMENTS........ | | | Δ |

SYSTEM DESIGN......... | | | Δ————————————Δ |

COST, SCHEDULE, WBS... | | | | Δ————————————————Δ

BRIEFING.............. | | | | | | | Δ