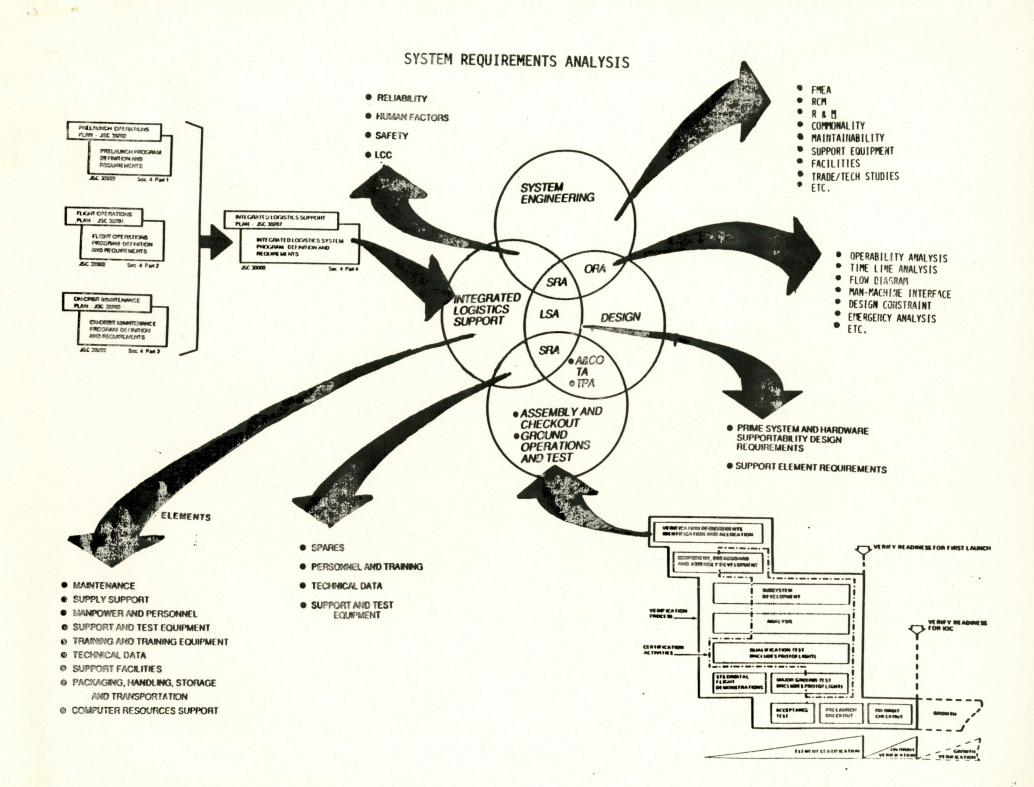
ILWG PRESENTATION
SYSTEM REQUIREMENT ANALYSIS (SRA)
LOGISTICS INTERFACES
LOGISTICS FLOW DIAGRAMS

C. H. LAUBACH NASA-JSC-LEVEL B



MAINTAINABILITY (M)

- MAINTAINABILITY
 - PREDICTIONS
 - MODELING INPUTS
 - ALLOCATION
 - DATA COLLECTION
- FAULT DETECTION AND ISOLATION DESIGN APPROACH
- RESULTS OF M ANALYSIS AND ITS IMPACT ON MAINTENANCE, LSA AND REPAIR LEVELS
- MAINTENANCE AND LOGISTICS CONCEPTS
- BUILT-IN-TEST/EXTERNAL TEST SYSTEMS/TESTER
- PROJECTED MANPOWER SKILL REQUIREMENTS
- MAINTAINABILITY DEMONSTRATION

• FMEA/FMECA

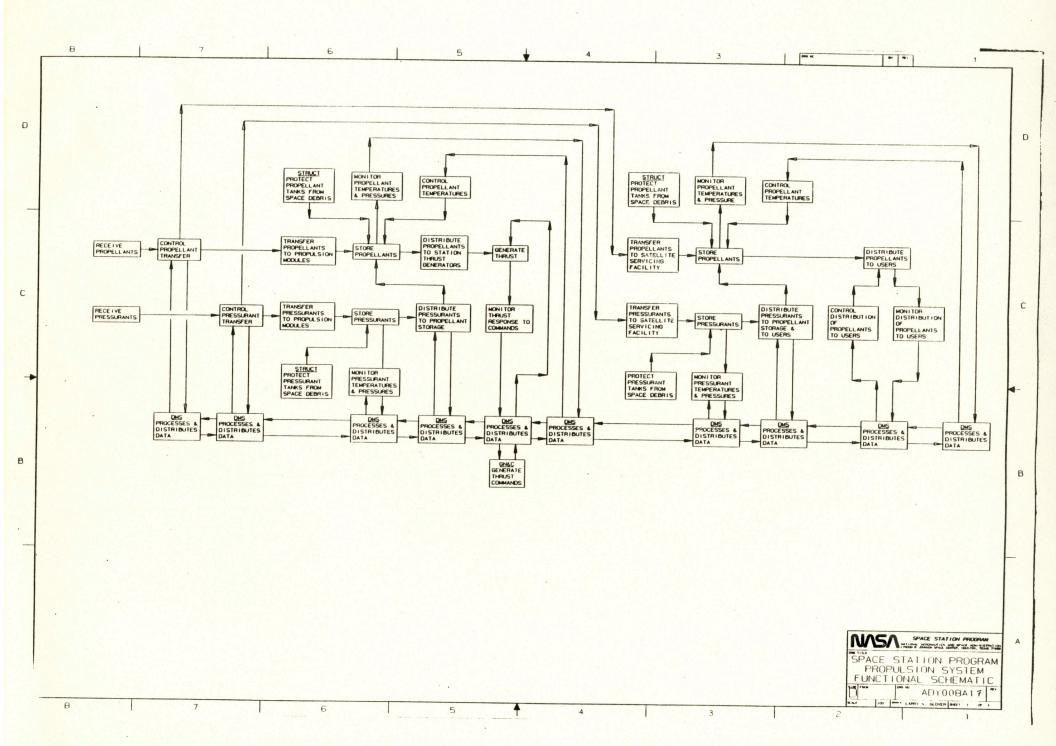
- IDENTIFICATION OF THE LIKELY MODES OF FAILURE
- EFFECT OF EACH FAILURE
- QUALITY INSPECTION POINTS
- OPERATIONAL CONSTRAINTS
- CRITICALITY TO:
 - MISSION SUCCESS
 - SAFETY
 - SUPPORTABILITY

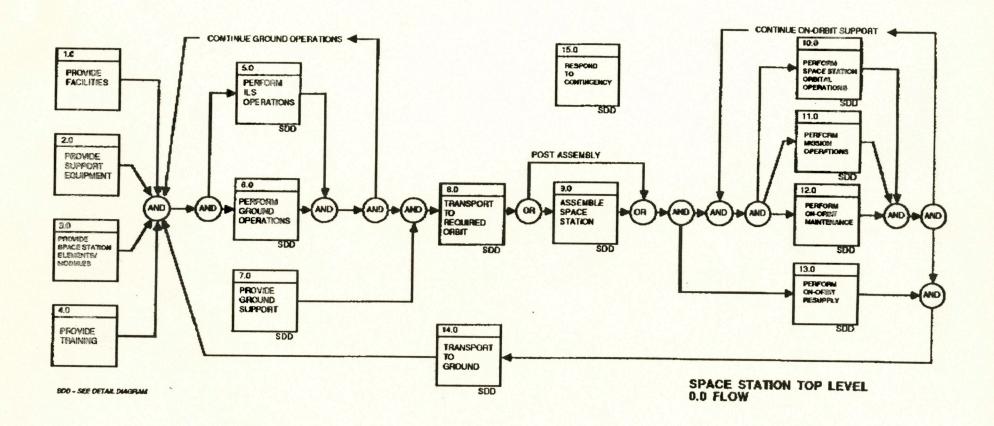
RCM

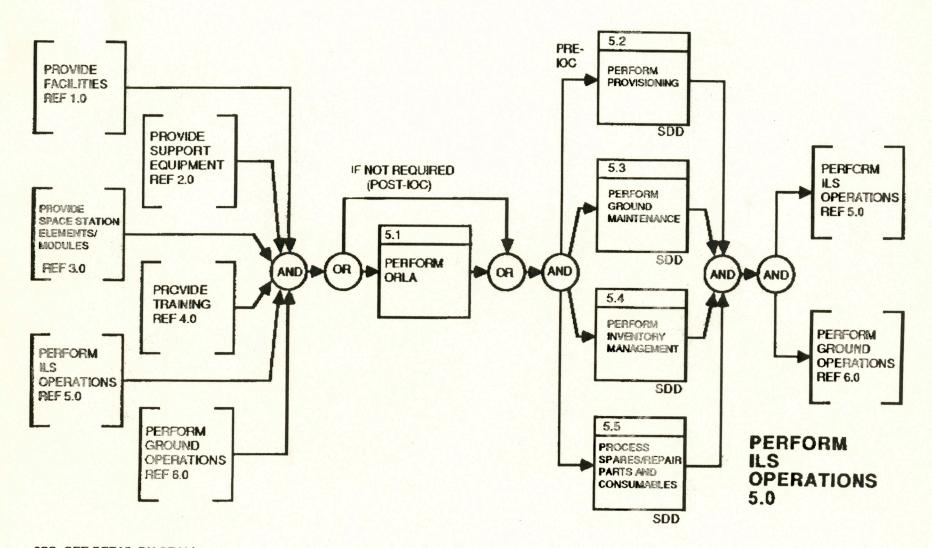
- HIGHLIGHT THE MAINTENANCE PROGRAM AREAS FOR DESIGN
 REVIEW CONSIDERATION
- DETERMINE THE FEASIBILITY OF PREVENTIVE MAINTENANCE
- DETERMINE THE DESIRABILITY OF PREVENTIVE MAINTENANCE
- DEVELOPMENT OF MOST EFFECTIVE PREVENTIVE MAINTENANCE
 PROGRAM

R&M

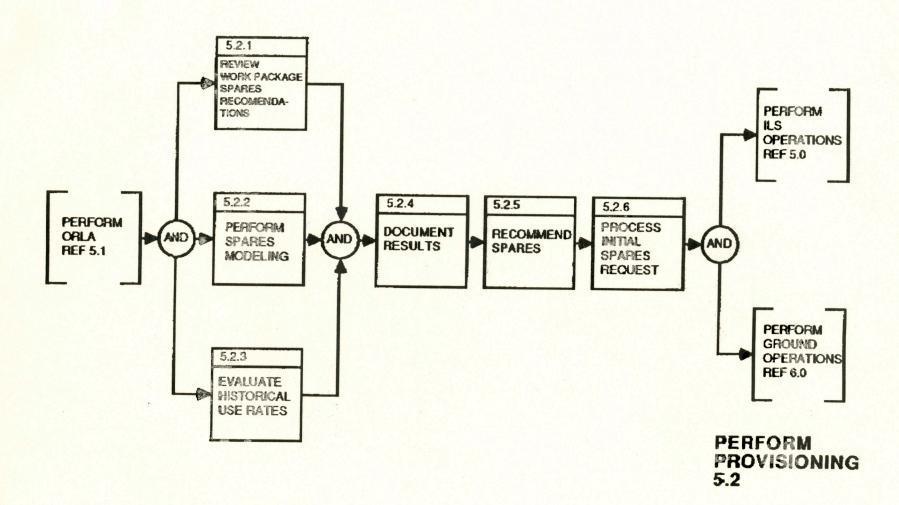
- FUNCTIONS OF TIME (MANHOURS)
- ATTRIBUTES OF FAULT DETECTION AND ISOLATION
- MEAN-TIME-TO REPAIR (MTTR)
- MEAN-TIME-TO RESTORE SYSTEM (MTTRS)
- MISSION TIME TO RESTORE FUNCTION (MTTRF)
- DIRECT MANHOURS PER MAINTENANCE ACTION (DMH/MA)
- PROBABILITY OF FAULT DETECTION
- PROBABILITY OF FAULT ISOLATION

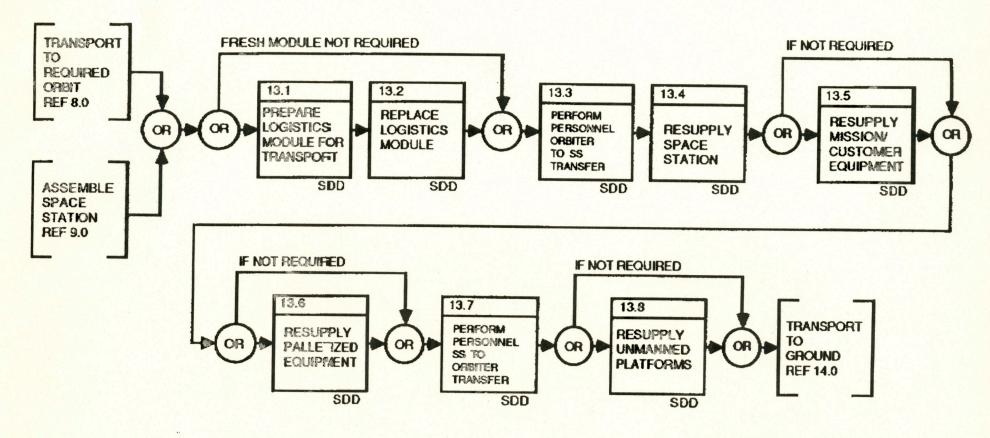






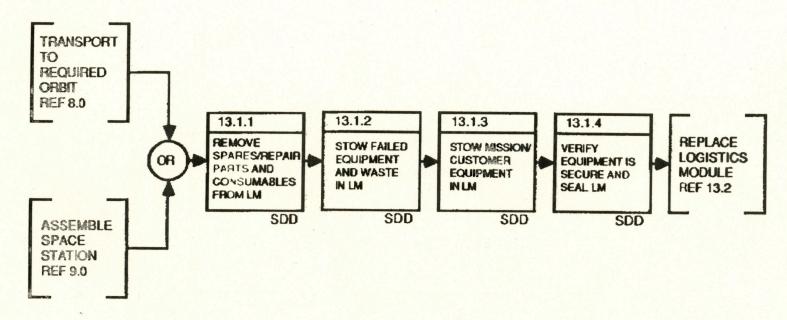
SDD=SEE DETAIL DIAGRAM





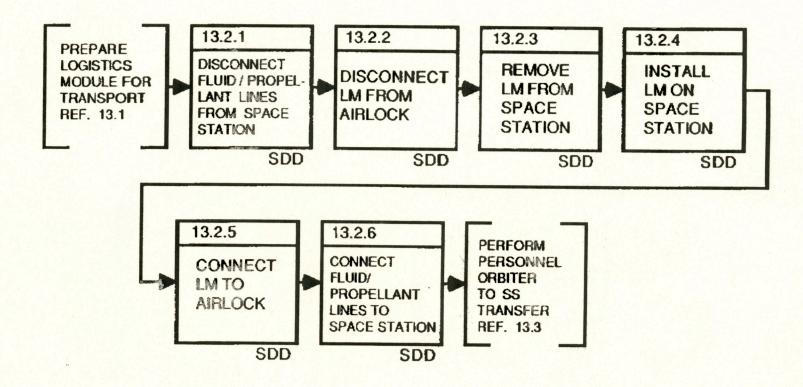
SDD = SEE DETAIL DIAGRAM

PERFORM ON-ORBIT RESUPPLY 13.0



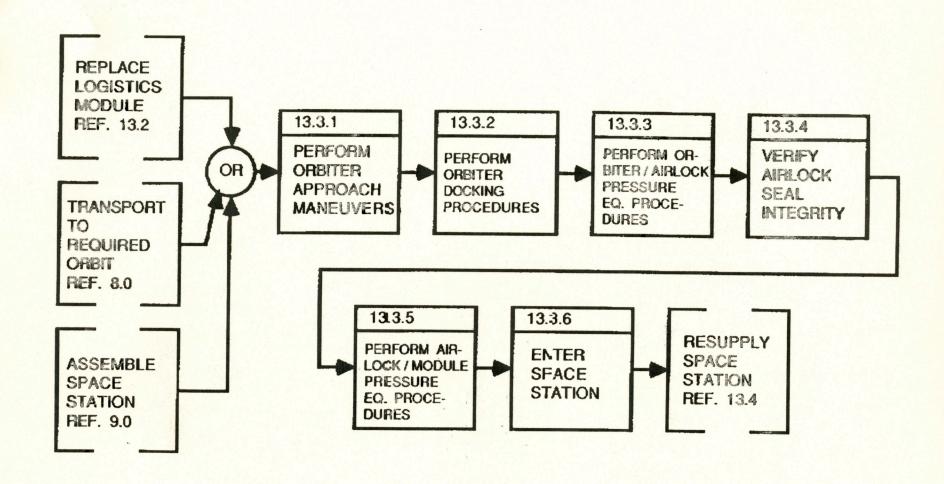
SDD=SEE DETAIL DIAGRAM

PREPARE LOGISTICS MODULE FOR TRANSPORT 13.1



SDD = SEE DETAILED DIAGRAM

REPLACE LOGISTICS MODULE 13.2



PERFORM PERSONNEL ORBITER TO SS TRANSFER 13.3

APPROVAL DATE: 00-00-00 FUNCTIONAL FLOW BLOCK NUMBER:____ FLOW BLOCK TITLE: LOGISTICS CONTROL NUMBER: _ CRITICAL _ IVA _ ON-LINE GROUND ON-ORBIT _ NON-CRITICAL _ EVA _ OFF-LINE FUNCTIONAL DESCRIPTION: _ MSE _ TECHNICAL DATA _ PERSONNEL _ FACILITY _ GSE _ FLIGHT ELEMENT _ INVENTORY SYSTEM _ DATA MANAGEMENT SYSTEM _ P, H, & T _ FOOD PROCESSING _ FUELS AND PROPELLANT SERVICING _ WASTE MANAGEMENT _ OTHER SPECIFIC ALLOCATION: REQUIREMENT: JUSTIFICATION:

10 . (6)