

NASA-CR-192818

Advanced Software Development Workstation

Knowledge Base Design

Design of Knowledge Base for Flight Planning Application

Michel Izygon

Barrios Technology, Inc.

December 31, 1992

**Cooperative Agreement NCC 9-16
Research Activity No. SR.02**

**NASA Johnson Space Center
Information Systems Directorate
Technology Development Division**

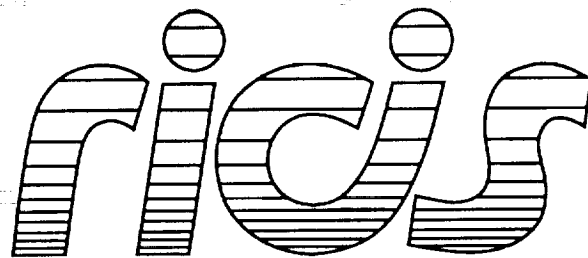
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(NASA-CR-192818) ADVANCED SOFTWARE
DEVELOPMENT WORKSTATION. KNOWLEDGE
BASE DESIGN: DESIGN OF KNOWLEDGE
BASE FOR FLIGHT PLANNING
APPLICATION (Research Inst. for
Computing and Information Systems)
16 p



*Research Institute for Computing and Information Systems
University of Houston-Clear Lake*

TECHNICAL REPORT

RICIS Preface

This research was conducted under auspices of the Research Institute for Computing and Information Systems by Dr. Michel Izygon of Barrios Technology, Inc. Dr. Rodney L. Bown served as the RICIS research coordinator.

Funding was provided by the Information Systems Directorate, NASA/JSC through Cooperative Agreement NCC 9-16 between the NASA Johnson Space Center and the University of Houston-Clear Lake. The NASA research coordinator for this activity was Ernest M. Fridge III, Deputy Chief of the Software Technology Branch, Technology Development Division, Information Systems Directorate, NASA/JSC.

The views and conclusions contained in this report are those of the author and should not be interpreted as representative of the official policies, either express or implied, of UHCL, RICIS, NASA or the United States Government.

Advanced Software Development Workstation

**Knowledge Base Design
Design of Knowledge Base for Flight Planning Application**

**Prepared for
NASA-Johnson Space Center**

December 31, 1992

**Submitted by
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Barrios Technology Inc.
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ABSTRACT

This deliverable contains the listing of the INTUIT knowledge base, and hardcopies of some panels developed with TAE+ as entry forms, developed for the Intelligent User Interface of the MOC/COMMAND system Test Library.

Knowledge Base Design
Design of Knowledge Base for Flight Planning Application
RICIS Project
Michel Izygon

Summary

The development process of the knowledge base for the generation of Test Libraries for Mission Operations Computer (MOC) Command Support focused on a series of information gathering interviews with Glen Rieke. These knowledge capture sessions are supporting the development of a prototype for evaluating the capabilities of INTUIT on such an application. The prototype includes functions related to POCC (Payload Operation Control Center) processing. It prompts the end-users for input through a series of panels and then generates the Meds associated with the initialization and the update of hazardous command tables for a POCC Processing TLIB.

This deliverable includes:

- the listing of the file TLIB_KB4.art, which is the knowledge base written in ART-IM,
- sample computer screen panels developed in order for the user to easily enter the needed data.

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TLIB_KB4.art

```
* -----*
(DEFSCHEMA CASES
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA SIGNON
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA CONSOLE_LIST
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA VEHICLE_LIST
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA PBI_LIST
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA MEDS
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

(DEFSCHEMA CASES_POCC
 (INSTANCE-OF SLOT)
 (CARDINALITY MULTIPLE)
 (INHERITS YES))

* -----*
(DEFSCHEMA MED
 (IS-A OBJECT)
 (NAME "MED"))

* -----*
(DEFSCHEMA SPEC_DEU_EQUI_CMD_GEN
 (IS-A CASE)
 (COMMENTS)
 (NAME "SPEC_DEU_EQUI_CMD_GEN"))

* -----*
(DEFSCHEMA MONITOR_AND_CONTROL
 (IS-A CASE)
 (NAME "MONITOR_AND_CONTROL"))

* -----*
(DEFSCHEMA COMMAND_TERM_PRTY_ABORT
 (IS-A CASE)
 (NAME "COMMAND_TERM_PRTY_ABORT"))

* -----*
(DEFSCHEMA NETWORK_MGMT_COMMAND
 (IS-A CASE)
 (COMMENTS))

* -----*
(NAME "NETWORK_MGMT_COMMAND")

* -----*
(DEFSCHEMA ONLINE_TAPE_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "ONLINE_TAPE_PROCESSING"))

* -----*
(DEFSCHEMA CONFIGURATION
 (IS-A CASE)
 (COMMENTS)
 (NAME "CONFIGURATION"))

* -----*
(DEFSCHEMA CONSOLE_CONFIGURATION
 (IS-A CASE)
 (NAME "CONSOLE_CONFIGURATION"))

* -----*
(DEFSCHEMA MANUAL_INPUT_PROCESSING
 (IS-A CASE)
 (NAME "MANUAL_INPUT_PROCESSING"))

* -----*
(DEFSCHEMA UPLINK_DATA_GEN_TXT_EDIT
 (IS-A CASE)
 (COMMENTS)
 (NAME "UPLINK_DATA_GEN_TXT_EDIT"))

* -----*
(DEFSCHEMA POCC_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "POCC_PROCESSING"))

* -----*
(DEFSCHEMA COMMAND_METERING
 (IS-A CASE)
 (COMMENTS)
 (NAME "COMMAND_METERING"))

* -----*
(DEFSCHEMA TWO_STAGE_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "TWO_STAGE_PROCESSING"))

* -----*
(DEFSCHEMA ORBITER_UPLINK_FORMAT
 (IS-A CASE)
 (COMMENTS)
 (NAME "ORBITER_UPLINK_FORMAT"))

* -----*
(DEFSCHEMA DISPLAY_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "DISPLAY_PROCESSING"))

* -----*
(DEFSCHEMA MED_I69
 (IS-A MED)
 (SCAN))
```


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TLIB_KB4.art

```
(CORRESPONDS--TO--ATTRIBUTE FL_ID)
(PARM-NAME "FL_ID")
(VALUE-TYPE INTEGER)
)

(DEFSCHEMA DATA_TYPE_SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS--TO--ATTRIBUTE DATA_TYPE)
(PARM-NAME "DATA_TYPE")
(VALUE-TYPE SYMBOL)
)

* -----
(DEFSCHEMA SYSTEM_CONFIGURATION
(IS-A CASE)
(COMMENTS)
(NAME "SYSTEM_CONFIGURATION"))

* -----
(DEFSCHEMA TLIB
(IS-A OBJECT)
(CASES_POCC)
(CASES_2STAGES)
(CASES_DELOGS)
(CASES_SYSTEM_CONFIGURATION)
(MEDS)
(FLIGHT_ID)
(SITE_ID)
(ORBITER_ID)
(NAME "TLIB"))

(DEFSCHEMA SITE_ID-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(HAS--ENUMERATED--SET SITE_ID-SET))

(DEFSCHEMA SITE_ID-SET
(INSTANCE-OF ENUMERATED-SET)
(ALLOWABLE-VALUES (BDA AGOS BOTS HAW IOS MIL YARS)))

(DEFSCHEMA ORBITER_ID-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(HAS--ENUMERATED--SET ORBITER_ID-SET))

(DEFSCHEMA ORBITER_ID-SET
(INSTANCE-OF ENUMERATED-SET)
(ALLOWABLE-VALUES (102 103 104 105)))

(DEFSCHEMA TLIB_FORMULA
(INSTANCE-OF FORMULA)
(ARGUMENTS (NAME FLIGHT_ID ORBITER_ID SITE_ID)
(ATTRIBUTE TEXT)
(FUNCTION TLIB_TEXT))

(DEFSCHEMA CASES_POCC-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(ALLOWABLE-CLASSES POCC_PROCESSING)
(ATTRIBUTE CASES_POCC))

(DEFSCHEMA CASES_2STAGES-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(ALLOWABLE-CLASSES TWO_STAGE_PROCESSING)
(ATTRIBUTE CASES_2STAGES))

* -----
(DEFSCHEMA CASE
(IS-A OBJECT)
(MEDS)
(NAME "CASE"))

; (DEFSCHEMA SPECIFIC_CASE
; (IS-A POCC_PROCESSING)
; (MEDS)
; (NAME "SPECIFIC_CASE"))

(DEFSCHEMA GENERIC_CASE
(IS-A CASE)
(MEDS)
(NAME "GENERIC_CASE"))

* -----
(DEFSCHEMA CASE_POCC_INITIALIZATION
(IS-A POCC_PROCESSING)
(SIGNON SWCO NET CMD)
(PRINT_LOAD_LIST YES)
(TELEMETRY)
(CONSOLE_LIST)
(CONSOLE_1 POI)
(CONSOLE_2 NIL)
(CONSOLE_3 NIL)
(CONSOLE_4 NIL)
(CONSOLE_5 NIL)
(VEHICLE_LIST)
(VEH_1)
(VEH_2 "NIL")
(VEH_3 "NIL")
(VEH_4 "NIL")
(VEH_5 "NIL")
(PBI_LIST)
(PBI_1)
(PBI_2 "NIL")
(PBI_3 "NIL")
(PBI_4 "NIL")
(PBI_5 "NIL")
(HAS--FORM--SPECIFICATION FORM-FOR-CASE_POCC_INIT)
(NAME "CASE_POCC_INITIALIZATION"))

; (DEFSCHEMA CASE_POCC_INIT_FORMULA
; (INSTANCE-OF FORMULA)
; (ARGUMENTS (NAME CONSOLE_1 CONSOLE_2 CONSOLE_3 CONSOLE_4 CONSOLE_5))
; (ATTRIBUTE CONSOLE_LIST)
; (CONSTRAINT OF CASE_POCC_INITIALIZATION)
; (FUNCTION CASE_POCC_INIT_FUN))

; (DEFSCHEMA CASE_POCC_INIT_2_FORMULA
; (INSTANCE-OF FORMULA)
; (ARGUMENTS (NAME VEH_1 VEH_2 VEH_3 VEH_4 VEH_5))
; (ATTRIBUTE VEHICLE_LIST)
; (CONSTRAINT OF CASE_POCC_INITIALIZATION)
; (FUNCTION CASE_POCC_INIT_FUN))

; (DEFSCHEMA CASE_POCC_INIT_3_FORMULA
; (INSTANCE-OF FORMULA)
; (ARGUMENTS (NAME PBI_1 PBI_2 PBI_3 PBI_4 PBI_5))
; (ATTRIBUTE PBI_LIST)
; (CONSTRAINT OF CASE_POCC_INITIALIZATION)
; (FUNCTION CASE_POCC_INIT_FUN))
```

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```
(DEFSHEMA SIGNON-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(HAS-ENUMERATED-SET SIGNON-SET))
)
(DEFSHEMA SIGNON-SET
(INSTANCE-OF ENUMERATED-SET)
(ALLOWABLE-VALUES (SWCO TLM CMD NET TRAJ)))
)
(DEFSHEMA MEDS-RESTRICTION
(INSTANCE-OF ATTRIBUTE-RESTRICTION)
(ALLOWABLE-CLASSES MED)
(ATTRIBUTE MEDS))
)
* -----
(DEFSHEMA FORM-FOR-CASE_POCC_INIT
(INSTANCE-OF FORM-SPECIFICATION)
(FILE-NAME "case.pocc.init.res")
(FORM-FOR-CLASS CASE_POCC_INITIALIZATION)
(HAS-PANEL-SPECS (PANEL-FOR-CASE_POCC_INIT)))
)
(DEFSHEMA PANEL-FOR-CASE_POCC_INIT
(INSTANCE-OF PANEL-SPEC)
(PANEL-NAME "caseinit")
(HAS-ITEM-SPECS CONSOLE_1-SPEC CONSOLE_2-SPEC CONSOLE_3-SPEC CONSOLE_4-SPEC CONSOLE_5-SPEC
TELEMETRY-SPEC
VEH_1-SPEC VEH_2-SPEC VEH_3-SPEC VEH_4-SPEC VEH_5-SPEC PBI_1-SPEC PBI_2-SPEC PBI_3-SPEC
PBI_4-SPEC PBI_5-SPEC))
)
(DEFSHEMA TELEMETRY-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE TELEMETRY)
(PARM-NAME "TELEMETRY")
(VALUE-TYPE SYMBOL)
)
)
(DEFSHEMA CONSOLE_1-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE CONSOLE_1)
(PARM-NAME "CONSOLE_1")
(VALUE-TYPE SYMBOL)
)
)
(DEFSHEMA CONSOLE_2-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE CONSOLE_2)
(PARM-NAME "CONSOLE_2")
(VALUE-TYPE SYMBOL)
)
)
(DEFSHEMA CONSOLE_3-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE CONSOLE_3)
(PARM-NAME "CONSOLE_3")
(VALUE-TYPE SYMBOL)
)
)
(DEFSHEMA CONSOLE_4-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE CONSOLE_4)
(PARM-NAME "CONSOLE_4")
(VALUE-TYPE SYMBOL)
)
)
```

```
(DEFSHEMA CONSOLE_5-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE CONSOLE_5)
(PARM-NAME "CONSOLE_5")
(VALUE-TYPE SYMBOL)
)
)
(DEFSHEMA VEH_1-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE VEH_1)
(PARM-NAME "VEHICLE_1")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA VEH_2-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE VEH_2)
(PARM-NAME "VEHICLE_2")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA VEH_3-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE VEH_3)
(PARM-NAME "VEHICLE_3")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA VEH_4-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE VEH_4)
(PARM-NAME "VEHICLE_4")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA VEH_5-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE VEH_5)
(PARM-NAME "VEHICLE_5")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA PBI_1-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE PBI_1)
(PARM-NAME "PBI_1")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA PBI_2-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE PBI_2)
(PARM-NAME "PBI_2")
(VALUE-TYPE STRING)
)
)
(DEFSHEMA PBI_3-SPEC
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE PBI_3)
(PARM-NAME "PBI_3")
(VALUE-TYPE STRING)
)
)
```


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```
(DEFSHEMA PBI_4-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE PBI_4)  
(PARAM-NAME "PBI_4")  
(VALUE-TYPE STRING)  
)
```

```
(DEFSHEMA PBI_5-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE PBI_5)  
(PARAM-NAME "PBI_5")  
(VALUE-TYPE STRING)  
)
```

```
* ----- *  
(DEFSHEMA CASE_POCC_HAZARD_CMD_UPD  
(IS-A POCC_PROCESSING)  
(OPTION)  
(TITLE)  
(VEHID)  
(GROUP ID)  
(MNEMONIC)  
(OPENHAZ)  
(ENBHAZ)  
(HAZCMD01)  
(HAZCMD02)  
(HAZCMD03)  
(HAZCMD04)  
(HAZCMD05)  
(HAZCMD06)  
(HAZCMD07)  
(HAZCMD08)  
(HAZCMD09)  
(HAZCMD10)  
(HAZCMD11)  
(HAZCMD12)  
(HAZCMD13)  
(HAZCMD14)  
(HAZCMD15)  
(HAZCMD16)  
(HAS-FORM-SPECIFICATION FORM-FOR-CASE_POCC_HAZ_CMD_UPD)  
(NAME "CASE_POCC_HAZARD_CMD_UPD")
```

```
* ----- *  
(DEFSHEMA FORM-FOR-CASE_POCC_HAZ_CMD_UPD  
(INSTANCE-OF FORM-SPECIFICATION)  
(FILE-NAME "hazar.cmd.res")  
(FORM-FOR-CLASS CASE_POCC_HAZARD_CMD_UPD)  
(HAS-PANEL-SPECS (PANEL-FOR-CASE_POCC_HAZCMD)))  
(DEFSHEMA PANEL-FOR-CASE_POCC_HAZCMD  
(INSTANCE-OF PANEL-SPEC)  
(PANEL-NAME "hazcmd")  
(HAS-ITEM-SPECS OPTION-SPEC VEHID-SPEC GROUPID-SPEC TITLE-SPEC MNEMONIC-SPEC OPENHAZ-SPEC  
EC ENBHAZ-SPEC HAZCMD01-SPEC  
C HAZCMD02-SPEC HAZCMD03-SPEC HAZCMD04-SPEC HAZCMD05-SPEC HAZCMD06-SPEC HAZCMD07-SPEC  
C HAZCMD08-SPEC HAZCMD09-SPEC HAZCMD10-SPEC HAZCMD11-SPEC HAZCMD12-SPEC HAZCMD13-SPEC  
C HAZCMD14-SPEC HAZCMD15-SPEC HAZCMD16-SPEC))  
(DEFSHEMA OPTION-SPEC
```

```
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE OPTION)  
(PARAM-NAME "OPTION")  
(VALUE-TYPE SYMBOL)  
)
```

```
(DEFSHEMA VEHID-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE VEHID)  
(PARAM-NAME "VEHID")  
(VALUE-TYPE INTEGER)  
)
```

```
(DEFSHEMA GROUPID-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE GROUPID)  
(PARAM-NAME "GROUPID")  
(VALUE-TYPE INTEGER)  
)
```

```
(DEFSHEMA TITLE-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE TITLE)  
(PARAM-NAME "TITLE")  
(VALUE-TYPE STRING)  
)
```

```
(DEFSHEMA OPENHAZ-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE OPENHAZ)  
(PARAM-NAME "OPENHAZ")  
(VALUE-TYPE SYMBOL)  
)
```

```
(DEFSHEMA ENBHAZ-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE ENBHAZ)  
(PARAM-NAME "ENBHAZ")  
(VALUE-TYPE SYMBOL)  
)
```

```
(DEFSHEMA MNEMONIC-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE MNEMONIC)  
(PARAM-NAME "MNEMONIC")  
(VALUE-TYPE STRING)  
)
```

```
(DEFSHEMA HAZCMD01-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE HAZCMD01)  
(PARAM-NAME "HAZCMD01")  
(VALUE-TYPE SYMBOL)  
)
```

```
(DEFSHEMA HAZCMD02-SPEC  
(INSTANCE-OF ITEM-SPECIFICATION)  
(CORRESPONDS-TO-ATTRIBUTE HAZCMD02)  
(PARAM-NAME "HAZCMD02")  
(VALUE-TYPE SYMBOL)  
)
```

```
(DEFSHEMA HAZCMD03-SPEC
```

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```
(INSTANCE-OF ITEM-SPECIFICATION)
(CORRESPONDS-TO-ATTRIBUTE HAZCMD03)
(PARM-NAME "HAZCMD03")
(VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD04-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD04)
 (PARM-NAME "HAZCMD04")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD05-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD05)
 (PARM-NAME "HAZCMD05")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD06-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD06)
 (PARM-NAME "HAZCMD06")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD07-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD07)
 (PARM-NAME "HAZCMD07")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD08-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD08)
 (PARM-NAME "HAZCMD08")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD09-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD09)
 (PARM-NAME "HAZCMD09")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD10-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD10)
 (PARM-NAME "HAZCMD10")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD11-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD11)
 (PARM-NAME "HAZCMD11")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD12-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
```

```
(CORRESPONDS-TO-ATTRIBUTE HAZCMD12)
(PARM-NAME "HAZCMD12")
(VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD13-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD13)
 (PARM-NAME "HAZCMD13")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD14-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD14)
 (PARM-NAME "HAZCMD14")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD15-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD15)
 (PARM-NAME "HAZCMD15")
 (VALUE-TYPE SYMBOL)
)

(DEFSCHEMA HAZCMD16-SPEC
 (INSTANCE-OF ITEM-SPECIFICATION)
 (CORRESPONDS-TO-ATTRIBUTE HAZCMD16)
 (PARM-NAME "HAZCMD16")
 (VALUE-TYPE SYMBOL)
)

* -----*
(DEFSCHEMA NASCOM_BLOCK_FORMAT
 (IS-A CASE)
 (COMMENTS)
 (NAME "NASCOM_BLOCK_FORMAT"))
* -----*

(DEFSCHEMA DATA_MANAGEMENT
 (IS-A CASE)
 (COMMENTS)
 (NAME "DATA_MANAGEMENT"))
* -----*

(DEFSCHEMA SERVICE_ROUTINES
 (IS-A CASE)
 (COMMENTS)
 (NAME "SERVICE_ROUTINES"))
* -----*

(DEFSCHEMA NETWORK_STATUS_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "NETWORK_STATUS_PROCESSING"))
* -----*

(DEFSCHEMA SUPPORT_PROCESSING
 (IS-A CASE)
 (COMMENTS)
 (NAME "SUPPORT_PROCESSING"))
```


Object: POC_02

OK Apply Close

Telemetry

YES NO

Consoles List Payload Vehicle Id Numbers PBI ID Numbers

PO1
PO2
PO3

veh 1:

PBI 1:

RL4
NIL

veh 2: NIL

PBI 2: NIL

RL4
NIL

veh 3: NIL

PBI 3: NIL

RL4
NIL

veh 4: NIL

PBI 4: NIL

RL4
NIL

veh 5: NIL

PBI 5: NIL