

X-Sender: jmullin@mail.hq.nasa.gov
X-Mailer: QUALCOMM Windows Eudora Version 4.3.2
Date: Wed, 19 Feb 2003 09:24:11 -0500
To: snakamur@ems.jsc.nasa.gov
From: "Jonathan B. Mullin" <jmullin@hq.nasa.gov>
Subject: Space Shuttle Mishap Information Request
Cc: jlemke@hq.nasa.gov, jlloyd@hq.nasa.gov, tom.whitmeyer@hq.nasa.gov

Stacey, reference your earlier undefined request for IRIS Data.

First, I understand that **all of the CAIB requests need to be managed through a single point, The Task Group, Mr. Buzzard.**

Secondly, in order to respond, please state the request specifically "by the numbers." Responses must be standardized from the agency to the CAIB. ILL defined requests will get you mixed data.

Thirdly, all mishap data that the CAIB may be seeking, may not have been put into IRIS. Consider all of the "floor paper" where less than a \$1,000 damage may have occurred. Consider, PRACA, MRB actions, open paper anomalies, etc. that are part of Quality Paper documentation.

Another feature to be reviewed would be the records of the contractor, such as the Incident Error Review Board (IERB) which has been extensively exercised at the Kennedy Space Center.

Fourth, consider what reports may have been made to the NASA Contracting Officer with respect to damage during this period of time.

With the potential sensitivity of this data, who is (are) the government official (s) assuring the process?

For my information, please copy me on the defined request.

Regards, Jon

Jonathan B. Mullin
Manager Operational Safety
Emergency Preparedness Coordinator
Headquarters National Aeronautics and Space Administration
Phone (202) 358-0589
FAX (202) 358-3104
"Mission Success Starts with Safety"

X-Sender: a.h.phillips@pop.larc.nasa.gov
Date: Tue, 18 Feb 2003 17:51:51 -0500
To: "Pamela F. Richardson" <Pamela.Richardson@hq.nasa.gov>
From: "Alan H. Phillips" <a.h.phillips@larc.nasa.gov>
Subject: Additional input for consideration
Cc: "Peter J. Rutledge" <prutledg@mail.hq.nasa.gov>, Jim Lloyd <Jlloyd@hq.nasa.gov>

Pls forward to the responsible parties. Note that it has ALREADY been sent to the HCAT.

Alan

Date: Tue, 18 Feb 2003 11:43:00 -0500
To: hcat@hq.nasa.gov
From: "Mark J. Shuart" <m.j.shuart@larc.nasa.gov>
Subject: Fwd: (no subject)
Cc: "SAUNDERS, MARK P" <M.P.SAUNDERS@larc.nasa.gov>, "PHILLIPS, ALAN H" <A.H.PHILLIPS@larc.nasa.gov>, "WYATT, CYNTHIA A" <C.A.WYATT@larc.nasa.gov>

To Whom It May Concern:

Attached is more information. I am starting to get many direct contacts because of the release of the emails last week.

Mark J. Shuart, PhD
Director for Structures & Materials
NASA Langley Research Center
Hampton, VA 23681
phone: (757) 864-3492
fax: (757) 864-7792

=====
From:
Date: Sat, 15 Feb 2003 15:25:32 EST
Subject: (no subject)
To: m.j.shuart@larc.nasa.gov

You don't know me but I was part of the SLC-6 crew when we first stacked Enterprise at the SLC at Vandenberg AFB. It has been many years ago, but I seem to remember over-hearing the contractor reps stating that because it was STS-1, the anomalies in the wiring with the release of the landing doors were being addressed at "Assembly". For some reason, this has remained with me for years even after I left Systems Command. I can not identify the contractor or personnel, There was a concern back then that the doors could be inadvertently be released from either the wiring configuration and not sensed by the well's closure sensor because of the termination locations. but

is it possible that the door was jarred on the impact of the ET foam and that pressure upwards and spring-back permitted a deformity of the door that upon re-entry permitted plasmaic gas to penetrate the well much as the o-rings on Challenger's SRB. The possibility of this action seems remote but at this point, I believe that it bears consideration.

--
Mark J. Stuart, PhD
Director for Structures & Materials
NASA Langely Research Center
Hampton, VA 23681

Alan H. Phillips
Director, Office of Safety and Mission Assurance
NASA Langley Research Center
5A Hunsaker Loop
Building 1162, Room 112C
Mail Stop 421
Hampton, VA 23681

(757)864-3361 Voice
(757)864-6327 Fax

X-Sender: jmullin@mail.hq.nasa.gov
X-Mailer: QUALCOMM Windows Eudora Version 4.3.2
Date: Wed, 19 Feb 2003 08:09:18 -0500
To: wayne.kee-1@ksc.nasa.gov
From: "Jonathan B. Mullin" <jmullin@hq.nasa.gov>
Subject: Fwd: FW: DOT Requirements
Cc: james.o.cheek@usago.ksc.nasa.gov, robert.t.gaffney1@jsc.nasa.gov,
Catherine.Angotti@hq.nasa.gov

Please, Assure that our field persons have this guidance in the Command Centers. Regards,
Jon

From: "Camomilli-1, Guy" <Guy.S.Camomilli@nasa.gov>
To: "Keprta, Sean" <sean.r.keprta1@jsc.nasa.gov>,
"Angotti, Cathy" <cangotti@hq.nasa.gov>,
"Mullin, Jonathan" <jmullin@mail.hq.nasa.gov>,
"Barry-1, William" <William.S.Barry@nasa.gov>,
"Gettleman-1, Alan" <Alan.G.Gettleman@nasa.gov>
Cc: "Roberts-1, Donald" <Donald.Roberts-1@ksc.nasa.gov>
Subject: FW: DOT Requirements
Date: Tue, 18 Feb 2003 10:13:57 -0500
Importance: high
X-Mailer: Internet Mail Service (5.5.2656.59)

FYI

I asked Don Roberts to coordinate directly with Don Paniale on these requirements directly.
Here's the information.

Guy Camomilli, MPH, CSP
Senior Environmental Health Officer,
OCHMO Tenant Office
guy.camomilli-1@ksc.nasa.gov
Voice (321) 867-1417
Fax (321) 867-8870

-----Original Message-----

From: Roberts-1, Donald
Sent: Monday, February 17, 2003 3:19 PM
To: Camomilli-1, Guy; Paniale, Donald A
Cc: Cardinale-1, Michael; Creech-1, Joanne; Ouellette-2, Robert (SGS)
Subject: DOT Requirements

Guy/Don

Based on our conversations concerning the suspected infectious substances at Barksdale AFB and using a conservative approach on the hazard classification of the material, I have outlined the general DOT requirements for transportation by public highway below.

1. The material is classified as a DOT hazardous material, hazard class 6, division 6.2 infectious substance
2. Shipping papers must include
 - * The DOT shipping description "Infectious substances, affecting humans (in the parentheses you must identify the name(s) of the infectious substance(s). If there are more than (1) you must list at least (2)), 6.2, UN2814" (29 CFR 172.101, 172.202)
 - * Total quantity of hazardous material including unit of measure (49 CFR 172.202)
 - * Signed shippers certification that states that the material is offered for transportation in accordance with the regulations. The regulations require a specific certification that is generally pre-printed on documents used for shipping hazardous materials. (49 CFR 172.204)
 - * Emergency response telephone number. The number must be monitored at all times the material in transport and must be manned by a person knowledgeable of the hazardous material being shipped (49 CFR 172.604)
 - * Emergency response information. The easiest way to comply with this requirement is to reference the guide number in the "Emergency Response Guidebook" and ensure that the driver carries the guidebook with the shipment or a copy of the specific guide is attached to the paperwork. The guide number is "158" for the haz material ID# UN2814. If you feel that additional emergency response information is needed include this in addition to the above information. (49 CFR 172.602)
3. Packaging must be comprised of a watertight primary receptacle (glass metal or plastic with a positive means of ensuring a leakproof seal such as heal seals or adhesive tape on screw caps.), a watertight secondary package, and an outer package that is capable of passing the tests specified in 49 CFR 173.609. I have never checked with container suppliers to see if they carry drums or boxes that meet this criteria but I am sure that they do.
4. An itemized list of the contents of the package must be enclosed between the secondary packaging and the outer packaging. (49 CFR 173.196)
5. Each outer packaging must be marked with the "Infectious Substance" label. (40 CFR 173.432)
6. Driver must have the appropriate hazardous materials training (49 CFR 172.700)
7. There is no DOT requirement for placarding the vehicle.

I'm sorry if this seems confusing but there are special requirements for infectious substances as well as the general requirements. I tried to provide only the information pertinent to your situation as I understand it. Please let me know if I can provide any additional support.

Don Roberts, CHMM
Lead Engineer, Evaluation and Planning
SGS Waste Management
Phone: (321) 867-8642
Fax: (321) 867-9390

Jonathan B. Mullin
Manager Operational Safety
Emergency Preparedness Coordinator
Headquarters National Aeronautics and Space Administration
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X-Sender: jlloyd@mail.hq.nasa.gov
X-Mailer: QUALCOMM Windows Eudora Version 4.3.2
Date: Fri, 14 Feb 2003 15:29:04 -0500
To: smadir@hq.nasa.gov
From: James Lloyd <jlloyd@hq.nasa.gov>
Subject: Fwd: FW: Columbia InvestigationRev.ppt
Cc: GarriH@kscems.ksc.nasa.gov, prichard@hq.nasa.gov

As promised in today's teleconference, I am forwarding, for your information, the presentation charts that were given by Bert Garrido to the CAIB on Thursday.

From: "Garrido-1, Humberto (Bert)" <Humberto.T.Garrido@nasa.gov>
To: "jlloyd@hq.nasa.gov" <jlloyd@hq.nasa.gov>
Subject: FW: Columbia InvestigationRev.ppt
Date: Fri, 14 Feb 2003 13:55:35 -0500
X-Mailer: Internet Mail Service (5.5.2656.59)

-----Original Message-----

From: Garrido-1, Humberto (Bert) [<mailto:Humberto.T.Garrido@nasa.gov>]
Sent: Friday, February 14, 2003 11:47 AM
To: Kinslow-1, Virginia
Cc: Gross-1, Sue; Gawronski-1, Anne; Zeidler-1, Pam; Engler-1, Thomas; Katnik, Greg; Wetmore-1, Mike; Kennedy-1, James; Higgins-1, William; Robling, Stephen; Toledo-1 Oscar; Tilley-1, Randall; Bridges-1, Roy; Gordon-1, Joseph; Gordon-1, Mark; Segert-1 Randall; Jansen-1, Bruce; Lebron-1, Edmundo (Eddie); Delgado-1, Hector; Branard-1, John; Ackroyd-1, Linda; Haddad-1, Michael; Huet-1, Sharolee; Bartell-1, Shannon; 'jlloyd@jq.nasa.gov'; 'prutledg@hq.nasa.gov'; Harrison, Ruth; 'rpatrica@hq.nasa.gov'; 'whill@hq.nasa.gov'; 'yolanda.y.marshall@jsc.nasa.gov'; 'amanda.h.goodson@nasa.gov'; Tucci-1, Larry; Lyons-1, Doug; Minute-1, Stephen
Subject: Columbia InvestigationRev.ppt

<<Columbia InvestigationRev.ppt>>
Ginny

As requested by Mr. Frank Buzzard, enclosed is the presentation made to the CAIB on February 13, 2003, during lunch. I modified Chart 15, The notional CoFR approvals, to reflect Mr. O'Connor's suggested corrections. The top box was changed from "go for launch" to "proceed with preparations to launch" and the footnote was added.

Bert Garrido
(321) 867-1982

 Columbia InvestigationRev.ppt

Jim

**Presentation to Columbia Accident Investigation
Board**

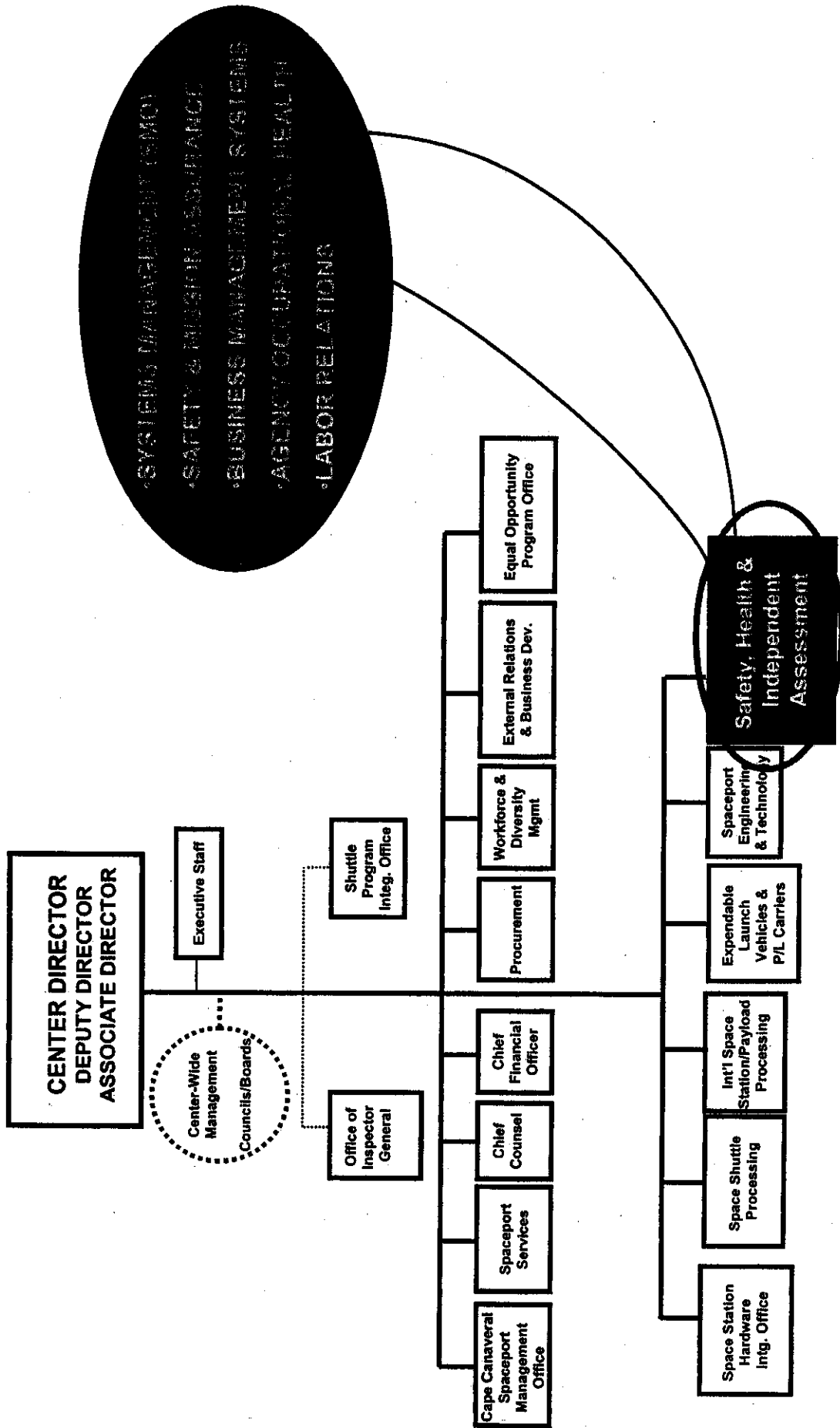
February 13, 2003

**Kennedy Space Center
Safety, Health & Independent Assessment (SH&IA)
Directorate**

Oscar Toledo, SH&IA Acting Director
Systems Management Office

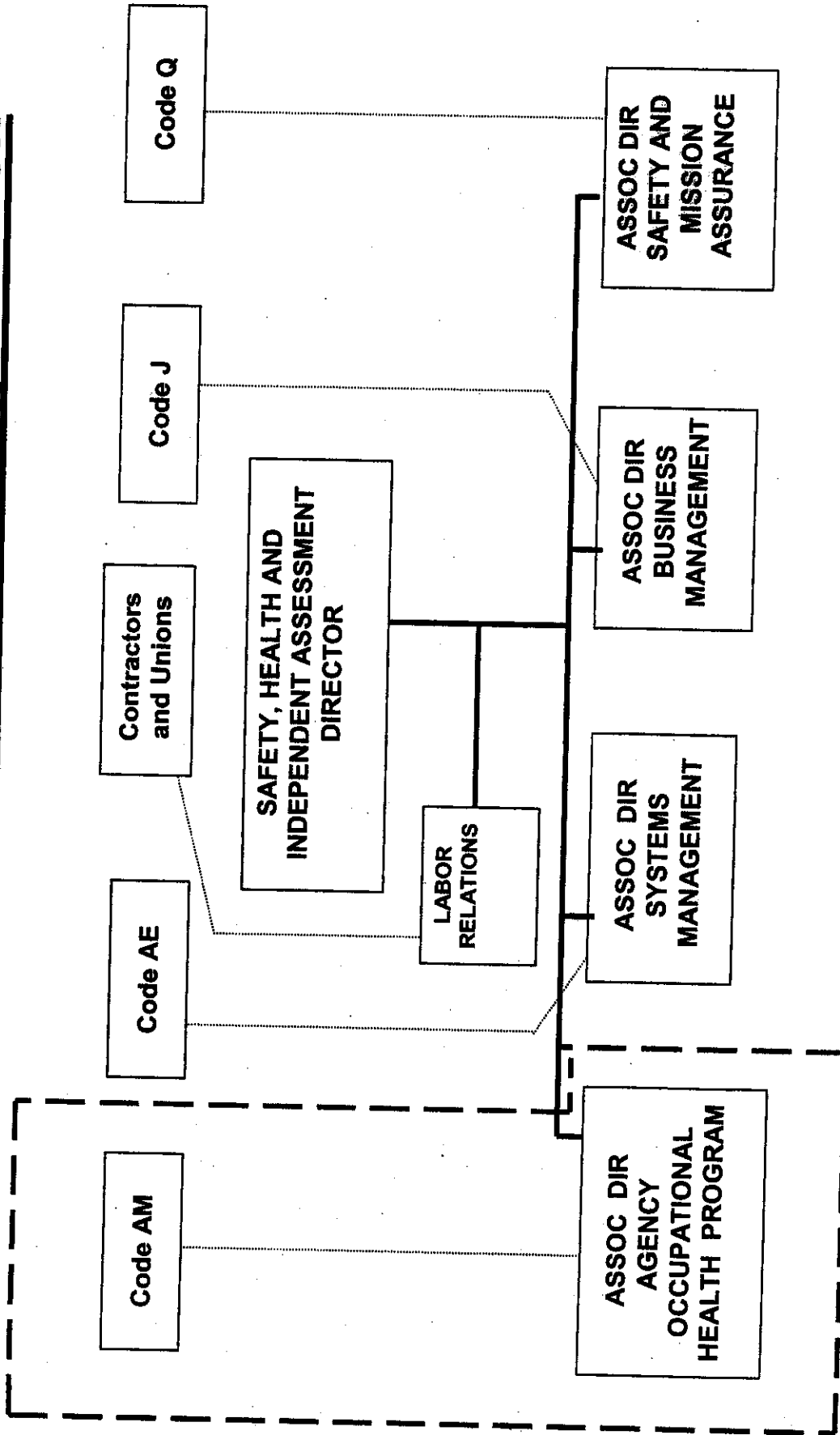
Bert Garrido, Associate Director
Safety & Mission Assurance

KSC Organizational Structure



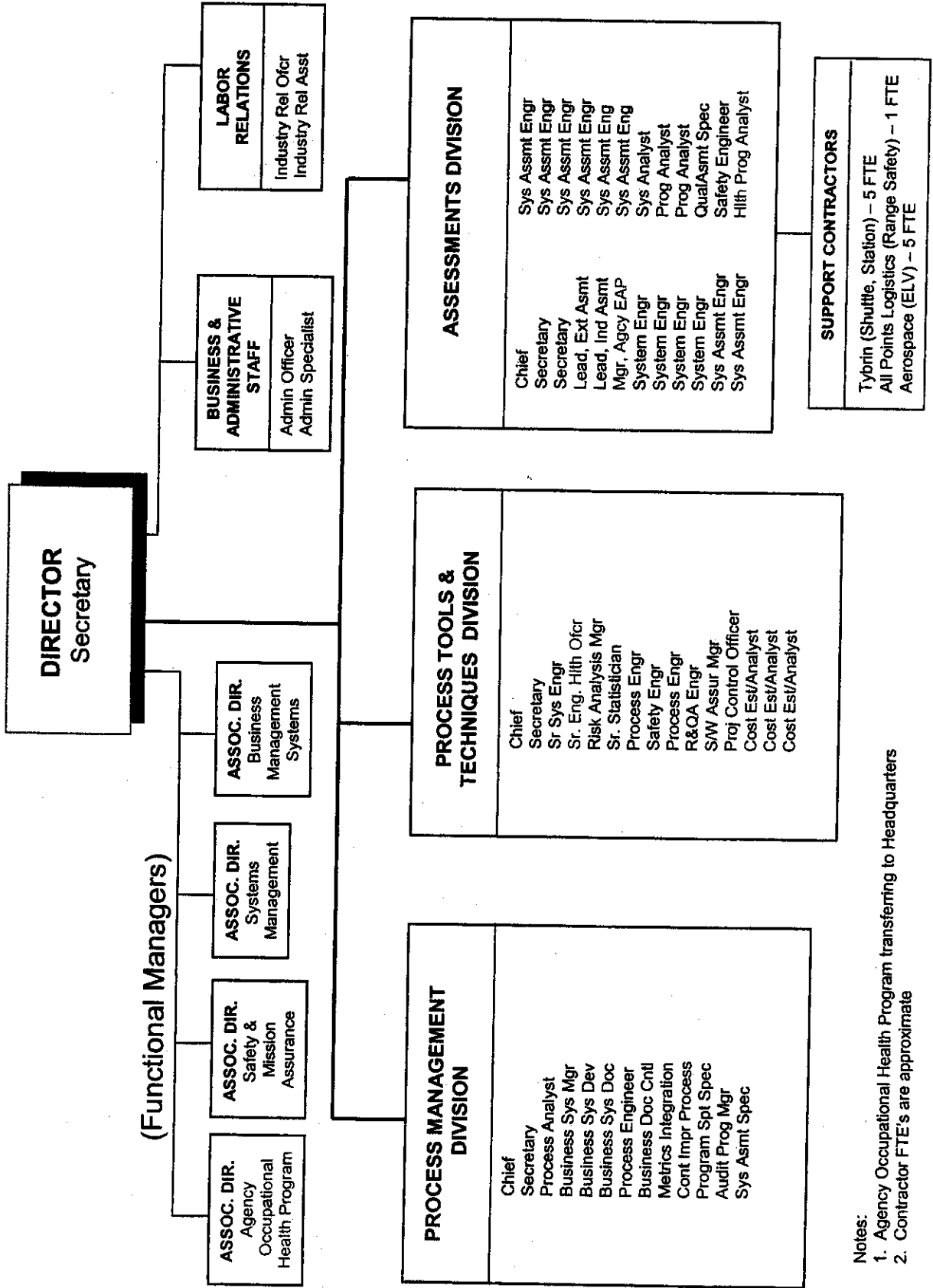
• SYSTEMS MANAGEMENT (SMO)
 • SAFETY & MISISSIPPI SOURCE
 • BUSINESS MANAGEMENT SYSTEMS
 • AGENCY OCCUPATIONAL HEALTH
 • LABOR RELATIONS

SH&IA Functional Organization



Recent MOU moves this function
To Headquarters Residence Office

SAFETY, HEALTH & INDEPENDENT ASSESSMENT DIRECTORATE



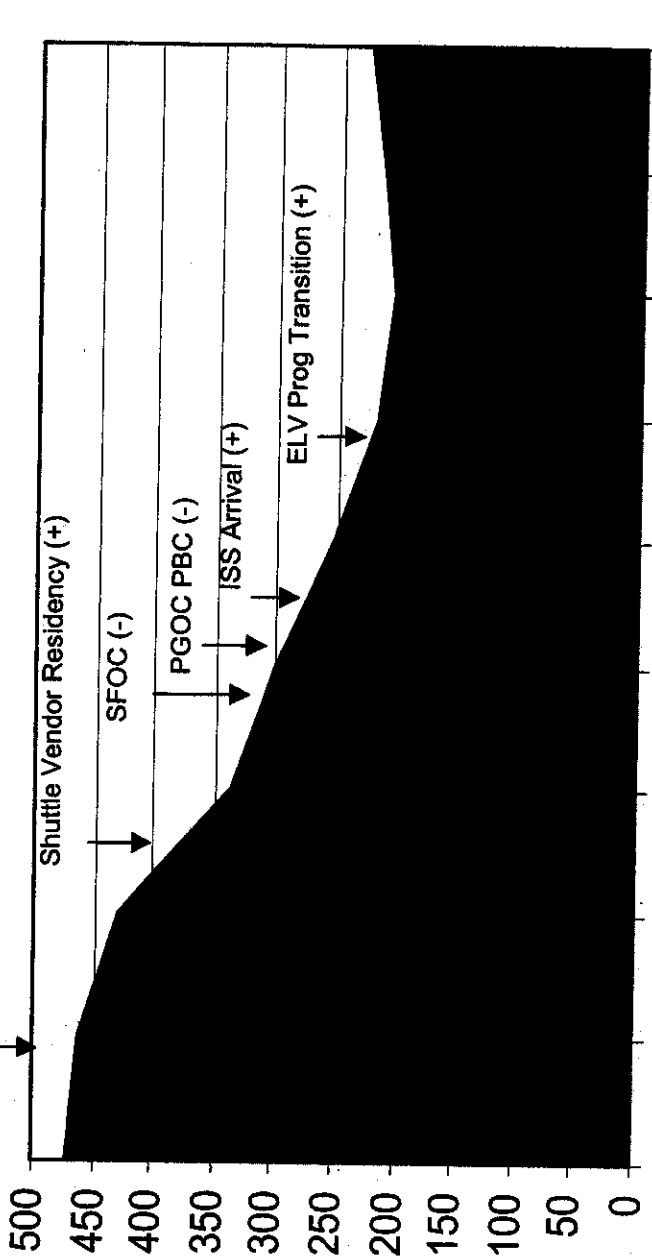
- Notes:
1. Agency Occupational Health Program transferring to Headquarters
 2. Contractor FTE's are approximate

Safety & Mission Assurance at KSC

- The "KSC 2000" reorganization went from Centralized S&MA to Distributed S&MA for the Following Reasons
 - Line Organizations did not Demonstrate Responsibility for Safety
 - S&MA Directorate so Focused on Day-to-Day Work that Independent Assessment Suffered
- SH&IA Formed to
 - Perform Independent Assessments of the "doing" organizations
 - Integrate S&MA community through S&MA Board
 - Centralize S&MA Policy Development
 - Provide S&MA Consultation Services
- The "doing" organizations are responsible for implementing the S&MA policies and processes to satisfy customer requirements
 - Perform surveillance of contractors

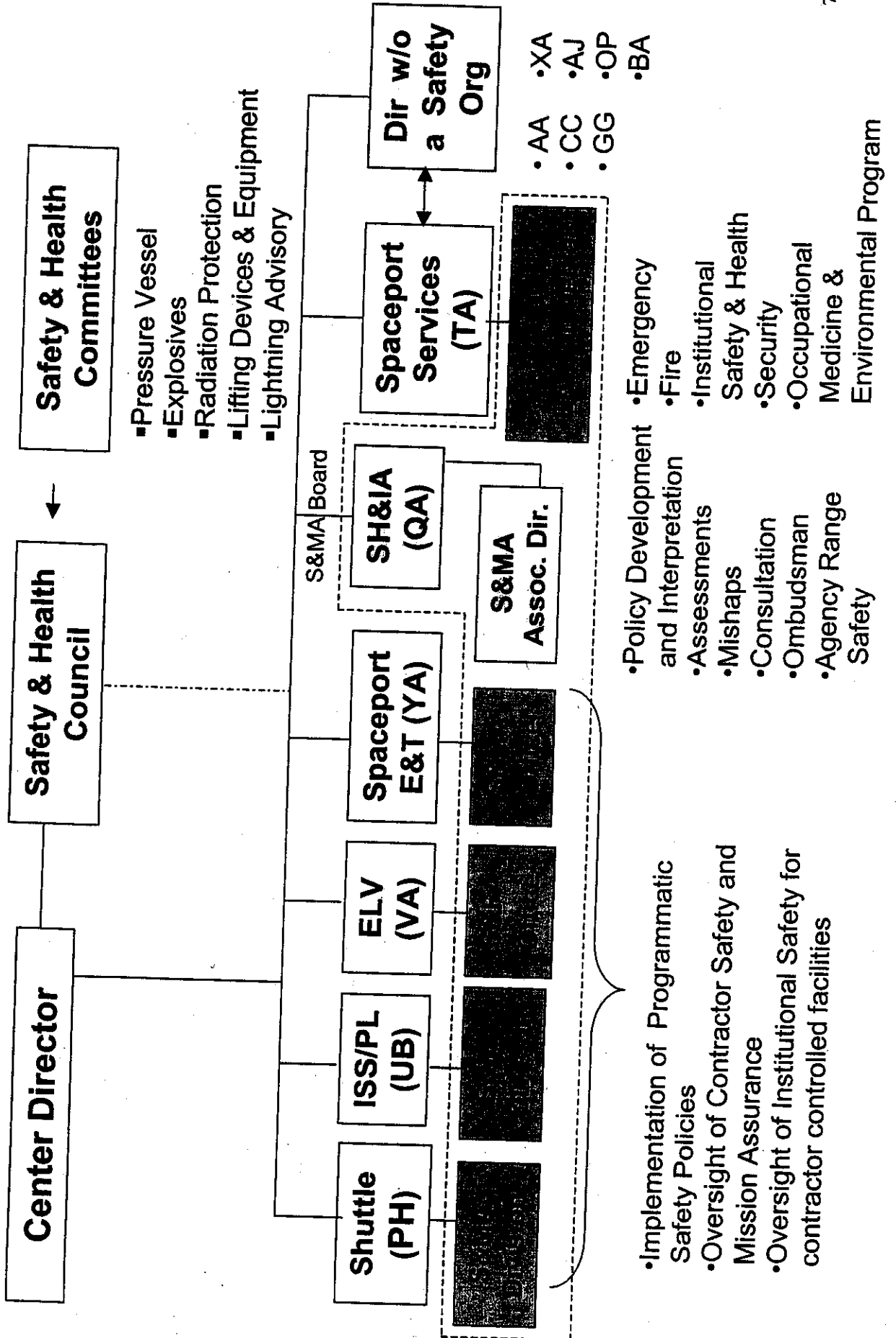
S&MA Resources at KSC

NASA Shuttle Logistics Depot (NSLD) Online (+)



■ NASA Contractor (S&MA)
* Buyout

S&MA Management Organizational Structure



Safety, Health and Independent Assessment (SH&IA) Safety and Mission Assurance (S&MA) Responsibilities

- KSC Chief Safety Officer
- Develop KSC safety policy, KSC Center level processes and resolve safety and mission policy issues by interpreting policy
- Assess operating organizations from a safety and mission assurance perspective
 - Ensure that safety and mission assurance programs are effective and efficient
 - Recommend actions
 - Provide performance input to Center Director and Organizational Directors
- Perform independent flight readiness assessments
 - Shuttle and Station, support programs by evaluating KSC readiness
 - ELV, provide evaluation of KSC launch vehicle readiness and perform as delegated Code Q flight readiness signature for launch vehicle and spacecraft
 - Participate in all Launch Decisions
- Perform Agency Range Safety Management (through Memorandum of Understanding with Code Q)
- Investigate major safety violations or mishaps and conducts special investigations; Assist mishap investigation boards
- Act as primary interface to Headquarters Code Q Office of Safety and Mission Assurance

Safety, Health and Independent Assessment (SH&IA) **Safety and Mission Assurance (S&MA) Responsibilities** **(Continued)**

- Provide S&MA consulting services (risk management, surveillance, policy, investigations, etc.)
- Plan and coordinate Center resources for S&MA
 - Coordinate Code Q budget at KSC (UPN 323)
 - Prepare Code Q Annual Operating Agreement
- KSC Safety Ombudsman
- Coordinate NASA Safety Training Center (NSTC) courses
- Prepare and review Center-level Safety Metrics
- Coordinate Aerospace Safety Advisory Panel (ASAP) visits
- Manage the NASA Safety Reporting System (NSRS) process at KSC
- Co-chair the KSC Safety and Health Labor Management Committee
- Coordinate KSC Safety and Health Council meetings
- Coordinate KSC Safety and Mission Assurance Board meetings
- Chair the Voluntary Protection Program (VPP) Steering Committee
- Manage the Quality and Safety Achievement Recognition (QASAR) Awards

