DCN 963

CLOSE HOLD

Material contained herein is sensitive. Deputy Secretary of Defense guidance restricts the release of data or analysis pertaining to evaluation of military bases for closure or realignment until the Secretary of Defense forwards recommendations to the Base Closure Commission on March 1, 1995. All individuals handling this information should take steps to protect the material herein from disclosure.

BRAC 95
Joint Cross-Service Group on Test & Evaluation

VOLUME 1

Office of the Deputy Assistant Secretary of Defense
(Economic Reinvestment and Base Realignment and Closure)

Base Closure and Utilization
Room 3D814
(703) 697-8048/8050

CLOSE HOLD

BRAC 95
JOINT CROSS-SERVICE GROUP ON TEST & EVALUATION
VOLUME 1

A List of Members

B Meeting Minutes - Jan 18, 1994

C Meeting Minutes - Jan 25, 1994

D Meeting Minutes - Feb 1, 1994

E Meeting Minutes - Feb 8, 1994

F Meeting Minutes - Feb 15, 1994

G Meeting Minutes - Feb 22, 1994

H Meeting Minutes - Feb 28, 1994

I Meeting Minutes - Mar 8, 1994

J Meeting Minutes - Mar 15, 1994

K Meeting Minutes - Mar 22, 1994

L Meeting Minutes - Mar 29, 1994

M Meeting Minutes - May 24, 1994

N Meeting Minutes - May 31, 1994

A

BRAC 95
Joint Cross-Service Group
Test & Evaluation

Name	Organization	Phone	Fax
Co-Chairs			
Mr. Lee Frame	OSD OT&E	697-3655	614-8891
Mr. John Bolino	OSD T&E	697-4819	614-9103
Members/Alternates			
Mr. Irv Boyles	Co-Study Team Leader	697-7933	614-9103
Mr. Nick Toomer	Co-Study Team Leader	695-1565	614-8891
Mr. Walt Hollis	Army	695-0083	
Mr. John Gehrig	Army Alternate	695-8995	
LTC Dave Powell	Army TABS	697-6262	693-9322
Mr. Gerald Shiefer	Navy	(619) 939-1468	
CAPT Dave Rose	Navy Alternate	681-0487	
LTG (Ret) Howard Leaf	Air Force	697-4774	
Mr. Carroll Jones	Air Force Alternate	695-5619	
Mr. Parker Horner	AF/TER	697-1165	
Ms. Kathleen Ruemmele	BMDO	695-8830	
COL Mike Toole	BMDO Alternate	693-1578	
Dr. Don Linger	DNA	325-7694	
Mr. Tom Kennedy	DNA Alternate	325-1235	
Mr. Glenwood Bradley	DISA	(602) 538-5000	
Mr. G.W. Derbin	DISA Alternate	(602) 538-5030	
Mr. Frank Lewis	PA&E	697-0317	
Mr. Bob Bayer	OSD (ER&BRAC)	697-1771	
Mr. Michael McAndrew	OSD (ER&BRAC) Alternate	697-8048	693-7818
COL Tom Baker	DISA/JIEO/JCE	487-8291	

E

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, January 25, 1994

Minutes

The second meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, January 25, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The meeting opened with Mr. Frame outlining the agenda items to cover at today's meeting. The agenda included: (1) a review of the draft action plan and milestones; (2) consideration of adding a representative from the DoDIG and OSD Comptroller to the group; (3) the meeting schedule; (4) the use of the Reliance study; (5) assigning action items to group members; and (6) presentation of the action plan to the Steering Group.

After handing out the revised draft action plan and milestone schedule (attached), a discussion began on what part the Test and Evaluation Board of Directors will play in this phase of the BRAC 95 process. Three areas where the Group felt the need for the Board's expertise are in defining functions and bases to consider, the development of outsourcing policy, and assistance in designing measures of merit, guidelines, assumptions, and categories. The issue of whether the Board will do data collecting arose. The chairmen understood that since data used in the BRAC process must be certified, the Board may provide suggestions for T&E policy directives/guidance. The Group will handle the means for data collecting.

The milestone schedule was then addressed by the group. It was suggested that at third column be added later that would spell out whom would perform/lead each of the milestone tasks. Each item was discussed for relevancy and edits made. The edits would be submitted to the Steering Group prior to the January 28, 1994, BRAC 95 Review Group meeting.

The Action Plan was the next item discussed among the Group. The comments received from the Group members after the January 18, 1994, meeting were incorporated into this draft. There was a question about why some comments were not put into the new draft. The Group agreed to review any comments, included or excluded, that needed clarification or further agreement. The Group subsequently approved all edits to the action plan that would be forwarded to the Steering Group.

The next agenda item discussed pertained to additional membership to the T&E Joint Cross-Service Group. The DoDIG and Comptroller requested to have a representative sit on the Group. The chairmen asked the members whether they thought the Group should be expanded to include representatives of other

BRAC 95

Joint Cross-Service Group on Test & Evaluation

January 18, 1994

List of Attendees

Mr. Lee Frame, Acting Director, Operational Test & Evaluation
Mr. Irv Boyles, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Mr. Parker Horner, Air Force
Mr. Walt Hollis, Army
Mr. John Gehrig, Army
LTC Dave Powell, Army TABS
CAPT Dave Rose, Navy
CAPT Brian Buzzell, Navy BSAT
Mr. Frank Lewis, OSD PA&E
COL Tom Baker, OSD DISA
Dr. Don Linger, OSD Defense Nuclear Agency
Mr. Michael McAndrew, ODASD(ER&BRAC) BCU
COL Mike Toole, BMDO
MAJ Robin Pope, OSD DR&E

MILESTONES

BRAC 95 Cross-Service Group for T&E

Date	Milestone
18 January Week 1	Agreement on Meeting Schedule Agreement on Products Agreement on Milestones
25 January Week 2	Recommendations for changes to Base Closure Selection Criteria Definition of the Universe--determination of functions and bases to be addressed by the T&E cross-Service group (See "List of Service RDT&E Activities") Question: Do the co-chairmen want the Services to propose definitions of the universe? Or do the co-chairmen want to propose a definition?
8 February Week 4	Draft by Services jointly on guidelines and assumptions for cross-Service analysis.
15 February Week 5	Consensus on guidelines and assumptions for cross-Service analysis.
To 8 Feb ~~1 March~~ Week 7	Draft by Services jointly on standards, measures of merit and data elements for cross-Service analysis.
8 March Week 8	Consensus on standards, measures of merit and data elements for cross-Service analysis.
22 March Week 10	Identification of outsourcing policies; recommendations regarding these policies

After 1 April:

Date	Milestone
TBD with Services	Review of Services' excess capacity analyses.
TBD with Services	Development of closure or realignment alternatives.
TBD with Services	Development of numerical excess capacity targets
TBD with Services	Analysis of cross-Service tradeoffs

LIST OF SERVICE RDT&E ACTIVITIES

Provisional List of Army RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Aeromedical Research Laboratory
Fort Rucker, AL 36362-5292
Subordinate Activities:
Aeromedical R&D Center - Blast Operations Site
Kirtland AFB, NM

Armament Research, Development and Engineering Center
Picatinny Arsenal, NJ 07806-5000
Subordinate Activities:
ARDEC Coordination test office at Combat Systems Test Activity
Aberdeen PG, MD
ARDEC Coordination test office at Yuma Proving Ground
Yuma PG, AZ 85365
ARDEC Coordination test office at White Sands
White Sands Missile, NM 88002
ARDEC Coordination test office at Dugway Proving Ground
Dugway PG, UT 84022
ARDEC element, Rock Island Arsenal
Rock Island, IL 61299-6000
ARDEC element, Watervliet Arsenal
Watervliet, NY 12189-5000

Army Jefferson Proving Ground
Madison, IN

Army Research Laboratory
Adelphi, MD 20783-1197
Established in FY-92
Subordinate Activities:
Ballistic Research Directorate, ARL
Aberdeen Proving Grd, MD 21005-5066
Formerly Ballistic Research Laboratory
Harry Diamond Directorate, ARL
Adelphi, MD 20783-1197
Formerly Harry Diamond Laboratories
Human Engineering Directorate, ARL
Aberdeen Proving Grd, MD 21005-5001
Formerly Human Engineering Laboratory
Material Technology Directorate, ARL
Watertown, MA 02172-0001
Formerly Materials Technology Laboratory
Atmospheric Sciences Directorate, ARL
White Sands Msl Rng, NM 88002-5501
Formerly Atmospheric Sciences Laboratory
Electronics Technology & Devices Directorate, ARL
Fort Monmouth, NJ 07703-5000
Formerly Electronics Technology & Devices Laboratory
Vulnerability Assessment Directorate, ARL
White Sands Msl Rng, NM 88002-5513
Formerly Vulnerability Assessment Laboratory

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

ARL adjunct location
White Sands Missile, NM 88002
ARL adjunct location at NASA Langley Research Center
Hampton, VA
ARL adjunct location at NASA Lewis Research Center
Cleveland, OH
Harry Diamond Laboratory Research Facility, ARL
Woodbridge, VA
To be closed in 1994
Blossom Point Test Area, ARL
Blossom Point, MD

Army Research Office
Research Triangle Pk, NC 27709-2211

Aviation Research, Development and Engineering Center
St. Louis, MO 63120-1798
Subordinate Activities:
Aviation RDEC, Aviation Applied Tech Dir
Ft Eustis, VA 23604-5577
AVRDEC adjunct location-NASA Langley
Hampton, VA
AVREC adjunct location-NASA Lewis
Cleveland, OH
AVRDEC adjunct location-NASA Ames
Moffett Field, CA

Aviation Technical Test Center
Fort Rucker, AL 36362-5276
Subordinate Activities:
Airworthiness Qualification Test Directorate
Edwards AFB, CA 93523

Belvoir Research, Development and Engineering Center
Fort Belvoir, VA 22060-5606

CECOM Research, Development and Engineering Center
Ft. Monmouth, NJ 07703-5000
Formerly Center for C3 Sys
Subordinate Activities:
Center for Electronic Warfare/RSTA
Fort Monmouth, NJ 07703-5206
Was consolidated into Communications-Electronics RDEC
Center for Night Vision & Electro-optics
Ft. Belvoir, VA 22060-5677
Was consolidated into Communications-Electronics RDEC
CECOM Center for Signals Warfare
Warrenton, VA 22186-5100
Was consolidated into Communications-Electronics RDEC

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Chemical Research Development and Engineering Center
Aberdeen PG, MD 21010-5423

Cold Regions Research and Engineering Laboratory
Hanover, NH 03755-1290
Subordinate Activities:
CRREL-Alaska Office
Fairbanks, AK

Cold Regions Test Center
Fort Greely, AK 96508-7850

Combat Systems Test Activity
Aberdeen PG, MD 21005-5059

Construction Engineering Research Laboratories
Champaign, IL 61826-9005
Subordinate Activities:
Construction Engineering Research Lab, USA Engineering Division N.Central
Chicago, IL

Dugway Proving Ground
Dugway, UT 84022-5000
Subordinate Activities:
Dugway Proving Ground - Tropic Test Site
Panama

Electronic Proving Ground
Fort Huachuca, AZ 85613-7110

Engineer Waterways Experiment Station
Vicksburg, MS 39180-6199
Subordinate Activities:
EWES - Coastal Field Research Facility
Duck, NC

Institute of Surgical Research
Fort Sam Houston, TX 78234-5012

Materiel Systems Analysis Activity
Aberdeen PG, MD 21005-5071

Medical Research & Development Command
Frederick, MD 21702-5012

Medical Research Institute of Chemical Defense
Aberdeen PG, MD 21010-5425

Medical Research Institute of Infectious Diseases
Fort Detrick, MD 21702-5011

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Missile Research, Development & Engineering Center
Redstone Arsenal, AL 35898-5241

Natick Research, Development & Engineering Center
Natick, MA 01760-5000

OPTEC Test and Evaluation Command
Fort Hood, TX 76544-5065

Research Institute for the Behavioral & Social Sciences
Alexandria, VA 22333-5600

Subordinate Activities:

Res Inst for Behavioral & Social Sciences Field Unit
Presidio of Montery, CA
Res Inst for Behavioral & Social Sciences Field Unit
Fort Benning, GA
Res Inst for Behavioral & Social Sciences Field Unit
Fort Bliss, TX
Res Inst for Behavioral & Social Sciences Field Unit
Fort Knox, KY
Res Inst for Behavioral & Social Sciences Field Unit
Boise/Gowan, ID
Res Inst for Behavioral & Social Sciences Field Unit
Fort Rucker, AL
Res Inst for Behavioral & Social Sciences Field Unit
Orlando, FL
Res Inst for Behavioral & Social Sciences Field Unit
Fort Gordon, GA
Res Inst for Behavioral & Social Sciences - USA Europe
Europe
Res Inst for Behavioral & Social Sciences,
National Training Center Data & Analysis Center
Ft. Irwin, CA

Research Institute of Environmental Medicine
Natick, MA 01760-5007

Subordinate Activities:

Research Institute of Environmental Medicine - Field Facility
Pikes Peak, CO

Tank-Automotive Research, Development & Engr Center
Warren, MI 48397-5000

Topographic Engineering Center
Fort Belvoir, VA 22060-5546

Walter Reed Army Institute of Research
Washington, DC 20307-5100

Subordinate Activities:

Water Reed Army Institute of Research, USA Medical Component AFRIM
Thailand

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Water Reed Army Institute of Research, USA Medical Research Unit Brazil
Water Reed Army Institute of Research, USA Medical Research Unit Fort Bragg, NC
Water Reed Army Institute of Research, USA Medical Research Unit Korea
Water Reed Army Institute of Research, USA Medical Research Unit Europe
Water Reed Army Institute of Research, USA Medical Research Unit Kenya

White Sands Missile Range
White Sands, NM 88002-5014

Yuma Proving Ground
Yuma, AZ 85365-9102

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Aerospace Medical Research Laboratory
Pensacola, FL 32508-1046
Subordinate Activities:
Aerospace Medical Research Lab, Radio Communications Monitor
Pensacola, FL 32508-1046

Air Warfare Center
Arlington, VA 22243-600
Subordinate Activities:
NAWC Aircraft Division, Patuxent
Patuxent River, MD 20670-5304
formerly Air Test Center
NAWC Weapons Division
China Lake, CA 93555-6000
formerly Naval Weapons Center
Ordnance Missile Test Station
White Sands, NM 88002-5510
NAWC Aircraft Division, Warminster
Warminster, PA 18974-0591
formerly Air Development Center
NAWC Aircraft Division, Trenton
Trenton, NJ 08628-0176
formerly Air Propulsion Center
Weapons Evaluation Facility, Kirtland AFB
Albuquerque, NM 87117-5000
Pacific Missile Test Center
Point Mugu, CA 93042-5001
NAWC Aircraft Division, Lakehurst
Lakehurst, NJ
Naval Air Station
Point Mugu, CA
Air Weapons Station
China Lake, CA
NAWC Aircraft Division, Indianapolis
Indianapolis, IN

Biodynamics Laboratory
New Orleans, LA 70129-0407

Civil Engineering Laboratory
Port Hueneme, CA 93043-4328

Clothing and Textile Research Facility
Natick, MA 01760-0001

Command, Control and Ocean Surveillance Center
San Diego, CA 92147-5088
Subordinate Activities:
Electronic Systems Engineering Center
North Charleston, SC

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Electronic Systems Engineering Center
Vallejo, CA
Electronic Systems Engineering Center
San Diego, CA
Electronic Systems Engineering Center
Portsmouth, VA
Electronic Systems Command Systems Engineering Activity
St. Inigoes, MD
Electronic Systems Security Engineering Center
Washington, DC
Electronics Engineering Activity, Pacific
Pearl Harbor, HI
Command, Control and Ocean Surveillance, Software Support Group
San Diego, CA
Space Systems Activity
Los Angeles, CA

Dental Research Institute
Great Lakes, IL 60088-5259

Explosive Ordnance Disposal Technology Center
Indian Head, MD 20640-5070
Subordinate Activities:
Explosive Ordnance Disposal Technology Center Remote Sites
Indian Head, MD 20640-5070

Health Research Center
San Diego, CA 92186-5122

Medical Research Institute
Bethesda, MD 20889-5607
Subordinate Activities:
Naval Medical Research Institute Annex
Rockville, MD

Medical Research Unit #2
Jakarta, Indonesia, 96520-8132

Medical Research Unit #3
Cairo, Egypt,

Naval Research Laboratory
Washington, DC 20375-5000
Subordinate Activities:
NRL Detachment
Stennis Space Center, MS 39529-5004
formerly Oceanographic & Atmospheric Research Laboratory
NRL, Information Technology Div antenna range
Brandywine, MD
NRL, Information Technology Div test range
Pomonkey, MD

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

NRL, Condensed Matter & Radiation Sciences Div (detachment)
Brookhaven, NY
NRL, Research Computation Division
Sites Worldwide,
NRL, Space Sciences Division
Waldorf Annex, MD
NRL, Space Sciences Division facility
San Nicolas Island, CA
NRL, Space Sciences Division facility
Maryland Point, MD
NRL, Space Sciences Division E.O. Hulburt Center for Space Rsrch
NRL, Underwater Sound Reference Detachment
Orlando, FL
NRL Chesapeake Bay Detachment
Chesapeake Beach, MD
NRL Patuxent River Naval Air Station
Patuxent River, MD
NRL Tilghman Island field station
Tilghman Island, MD
NRL Midway Research Center
Quantico, VA
NRL Underwater Sound Reference Detachment - Bugg Spring
Leesburg, FL
NRL Marine Corrosion Facility
Key West, FL
Used by NLR under intra or inter-service agreement
NRL Ex-USS Shadwell (LSD-15) fire research vessel
Mobile Bay, AL
NRL Artificial Intelligence Center
Bolling AFB, Wash., DC
NRL Dock Facility, Fishing Creek
Chesapeake Bay, MD

Office of the Chief of Naval Research
Arlington, VA 22217-5660

Personnel Research and Development Center
San Diego, CA 92152-7250
Subordinate Activities:
Tri-Service Virtual Reality Laboratory, Naval Training Systems Ce
Orlando, FL 32826

Submarine Medical Research Laboratory, NAVSUBASE New London
Groton, CT 06349-5900

Surface Warfare Center
Arlington, VA 22242-5160
Subordinate Activities:
Carderock Division, NSWC
Bethesda, MD 20084-5000
formerly David Taylor Research Center

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Coastal Systems Station Dahlgren Division, NSWC
Panama City, FL 32407-7001
formerly Coastal Systems Center
Surface Weapons Center
Fort Lauderdale, FL
Ships Research & Development Test Facility
Bayview, ID
NSWC Dahlgren Division
Dahlgren, VA
Fleet Combat Direction Systems Act., Dam Neck Port Hueneme Div.
Virginia Beach, VA
Port Hueneme Division NSWC
Port Hueneme, CA
Ship Systems Engineering Station, Carderock Division
Philadelphia, PA
Crane Division NSWC
Crane, IN
Indian Head Division NSWC
Indian Head, MD
Integrated Combat Systems Test Facility Port Hueneme Division
San Diego, CA
Ordnance Station Crane Division
Louisville, KY
NSWC, Dahlgren Coastal Systems Station
Dahlgren, VA 22448
NSWC, Dahlgren Div White Oak Facility
Silver Spring, MD 20903-5000
NSWC, Carderock Division - Patuxent River
Patuxent River, MD
NSWC, Carderock Division - Memphis
Memphis, TN
NSWC, Carderock Annapolis Site
Annapolis, MD
NSWC, Carderock Division - Portsmouth site
Portsmouth, VA
NSWC, Carderock Division - Santa Cruz site
Santa Cruz, CA
NSWC, Carderock Division - Bremerton site
Bremerton, WA
Carr Inlet test facility.
NSWC, Carderock Division - Ketchikan site
Ketchikan, AK
NSWC, Carderock Division - Panama City
Panama City, FL
NSWC, Carderock Division - Cape Canaveral
Cape Canaveral, FL
NSWC, Carderock Division - Norfolk
Norfolk, VA

Undersea Warfare Center
Newport, RI 02841-1708

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Subordinate Activities:

NUWC Division, Newport
Newport, RI 02841-5047
formerly Underwater Systems Center
Atlantic Undersea Test & Evaluation Center
West Palm Beach, FL
Undersea Research & Development Calibration Station
Bayview, ID
NUWC Division, Keyport
Keyport, WA
NUWC Detachment
New London, CT
NUWC Detachment
Dodge Pond, CT
NUWC Detachment Andros Islands, Bahamas
Andros Is., Bahamas,
NUWC Detachment
Seneca Lake, NY
NUWC test site
Fisher's Island, NY
NUWC Detachment Hawaii
Pearl Harbor, HI
NUWC Detachment
San Diego, CA
NUWC Detachment
Bangor, WA
NUWC Northwest Range Nanoose Site
AK
NUWC Northwest Range Dabob Site
AK
NUWC Northwest Ranges Quinalt Site
AK
NUWC Langley Seawater Tow Tank
Langley Field, VA
NUWC San Clemente Island Underwater Range
San Clemente Island, CA

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

30th Space Wing
Vandenberg AFB, CA 93437

45th Space Wing
Patrick AFB, FL 32925

4950th Test Wing
Wright-Patterson AFB, OH 45433-5000
Subordinate Activities:
4950th Test Wing's 2000 sq mile restricted test area in SW Ohio
Southwestern, OH

6585th Test Group
Holloman AFB, NM 88330-5000

Air Force Office of Scientific Research
Bolling AFB, DC 20332-6448

Armstrong Laboratory
Brooks AFB, TX 78235-5000
Subordinate Activities:
Aerospace Medicine Lab - Directorate, Armstrong Lab
San Antonio, TX 78235-5000
Human Resources Directorate, Armstrong Lab
Brooks AFB, TX 78235-5601
Occupational and Environmental Health Directorate, Armstrong Lab
San Antonio, TX 78235-3500
Armstrong detachment, Lackland AFB
Lackland AFB, TX

Arnold Engineering Development Center (AFMC)
Arnold AFB, TN 37389-1314

Development Test Center
Eglin AFB, FL 32542-6861
Subordinate Activities:
Development Test Center Gulf water test areas
Eglin AFB, FL
Estimated location

Flight Test Center
Edwards AFB, CA 93524-5000
Subordinate Activities:
Flight Test Center, Utah test and training range
UT

Frank J. Seiler Research Laboratory
USAF Academy, CO 80840-6272
Under AFOSR & Super Labs

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Phillips Laboratory
Kirtland AFB, NM 87117-6008
Subordinate Activities:
Geophysics Laboratory - Directorate
Bedford, MA 01731
Phillips Laboratory, Air Force Maui optical station
Maui, HI
Phillips Lab Propulsion Directorate
Edwards AFB, CA

Rome Laboratory
Griffiss AFB, NY 13441-4514
Subordinate Activities:
Command, Control, and Communications Directorate, Rome Lab
Griffiss AFB, NY 13441-4505
Intelligence and Reconnaissance Directorate, Rome Lab
Griffiss AFB, NY 13441-4114
Surveillance & Photonics Directorate, Rome Lab
Griffiss AFB, NY 13441-4514
Electromagnetics & Reliability Directorate, Rome Lab
Hanscom AFB, MA 01731
Ava Research Facility, Rome Lab
Ava, NY
Forestport Research Facility, Rome Lab
Forestport, NY
Ipswich Research Facility, Rome Lab
Ipswich, MA
Newport Research Facility
Newport, NY
Prospect Hill Research Facility, Rome Lab
Waltham, MA
Stockbridge Research Facility, Rome Lab
Stockbridge, NY
Verona Research Facility, Rome Lab
Verona, NY

Wright Laboratory
Wright-Patterson AFB, OH 45433-6523
Subordinate Activities:
Materials Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Avionics Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Aero Propulsion and Power Lab-Directorate, Wright Lab
WPAFB, OH 45433
Electronic Technology Laboratory/Solid State Electronics Director
WPAFB, OH 45433
Flight Dynamics Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Armament Laboratory-Directorate, Wright Lab
Eglin AFB, FL 32542

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Crew Systems Directorate, Wright Lab
Dayton, OH 45433

Italic text indicates addition since 12/14/93 Edition

Provisional List of DNA RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Armed Forces Radiobiology Research Institute
Bethesda, MD 20889-5603

Italic text indicates addition since 12/14/93 Edition

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, January 18, 1994

Minutes

The first meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, January 18, 1994. Mr. Lee Frame, acting for the Director, Operational Test & Evaluation, chaired the meeting. A list of attendees is attached.

The meeting opened with Mr. Frame detailing requirements of the group in preparing a plan of action and milestones through March 31, 1994. The action plan and milestones would be the focal point for establishing guidelines for the Services to use in data collection and analysis.

The Group was then asked if they wanted an overview briefing highlighting responsibilities and tasking from the DepSecDef kick-off memorandum. The Group agreed this was necessary.

The overview of the BRAC 95 process began with a statement of objectives to achieve. These included retaining in only one Service militarily unique capabilities used by two or more Services, consolidating workload across the Services to reduce capacity, and assigning operational units from more than one Service to a single base.

The next two slides presented the seven guidelines that the cross-service Groups will follow during the process. Discussion ensued on the tasks the Group must accomplish by March 31, 1994. The tasks are: (1) determination of common support functions and facilities to be addressed by the T&E cross-service group; (2)establishment of guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for conduct of the cross-service analyses; (3) completion of an internal control plan; and (4) recommendation of an outsourcing policy. The discussion began by introducing a list of Service RDT&E activities compiled from different studies (attached). The question arose of how broad the definition of facilities/functions should reach. The Group agreed that they should examine all facilities at Major Range and Test Facility Base, laboratories, and logistic centers that perform test and evaluation work. The chairman then asked the Services to review this list and bring changes to the next meeting. The list will then be reviewed within the Group and subsequently shared with the Joint Cross-Service Group on Laboratories to ensure no duplication of facilities/functions occur. A follow-on discussion ensued on how the Group would address test and evaluation functions performed at depots. The Group agreed a representative from this Group should attend the Joint Cross-Service Group on Depot Maintenance to facilitate coordination of

information on collocated activities. The Group also agreed that a goal of February 1, 1994 be established for defining the facilities/functions.

The Group reviewed the record keeping do's and don'ts. The Group acknowledged the importance of maintaining an accurate accounting of the Group's decision making process.

A discussion then took place on the need for an internal control plan, when it is required, what comprises an internal control plan and who will author the document. Because the Group intends to review the Services certified data for later use in proposing alternatives to the Services, they agreed that an internal control plan is needed. The chairman asked the Navy and Army representatives to meet and forward a draft internal control plan to the Group based on their plans from prior BRAC rounds. The Service representatives agreed to look into this, and Mr. Boyles will use them to draft a plan for the Group.

The Group began a discussion on the use of the term "base" in the DepSecDef kick-off memo as related to establishing measures/factors for applying the final criteria. Since test and evaluation functions are not directly related to bases but rather to facilities, the Group agreed that use of the term "facility" could be used in place of the word "base" to achieve the same intended result.

A discussion ensued about the milestones and proposed dates to achieve these milestones. A strawman milestone chart (attached) outlined how the Group would proceed throughout the initial phase of the BRAC process. At this time a second set of slides highlighting action plans and milestones was handed out (attached) to further define the Group's deadlines. The Group agreed with the "immediate actions" requirements and the strawman action plan. The Group further identified those actions in the "Summary of Actions" slide which are "have to do" by March 31, 1994. The remaining actions would be carried out after March 31, after providing the Services with initial guidance.

Also attached is a draft Plan of Action for the Joint Cross-Service Group. The chairman asked the Group to review this plan and provide comments to Mr. Irv Boyles within 24 hours of recommended changes or comments to be considered for discussion.

Also provided was a white paper on the preliminary analysis guidelines, standards, assumptions, measures of merit and data elements starting on page 10. Based on this strawman the Group agreed that a clear definition of measures of merit are needed by the second week in February, 1994. The Services were asked to provide draft measures of merit by February 4, 1994, for discussion at a meeting tentatively scheduled for February 8, 1994. Discussion ensued regarding the expectations the measures of merit should reflect. In defining measures of merit consideration for capability/capacity in the future must result. The Group was concerned that inaccurately defining the measure

could result in closures or realignments that leave too much or too little infrastructure for future efforts. The Group agreed a primary driver for defining measures should be the RDT&E budget. The question of using the Reliance Study or database was raised. The Group agreed this would be an ideal tool to build on in identifying categories and measures of merit.

Additionally, results of the February 8th meeting will result in development of data elements to support the measures of merits provided by the Services and agreed upon by the Group. The Group agreed to a deadline of March 1, 1994, for consensus on the required data elements to support the measures of merit.

Discussion then ensued about the use of contractors to assist in the Group's efforts. The Group was divided on how to use contractors and, if so, how to protect the data retrieved through Service data calls. The Group agreed to table this topic until more information can be obtained.

The meeting concluded at 1030.

Approved:

Lee Frame
Co-Chairman

Irvin E. Boyles
Acting Co-Chairman

Attachments

TEST AND EVALUATION

JOINT CROSS-SERVICE GROUP

January 18, 1994

1. **Action Plan**
2. **Milestones**

IMMEDIATE ACTIONS

- Direction from USD(A&T) Memo, January 3, 1994
  - By January 21, 1994

    Action Plan

    Milestones
  - Week of January 24-28, 1994

    BRAC 95 Review Group will review Action Plans and Milestones
- Internal Control Plan
- Records keeping process

STRAWMAN ACTION PLAN

- Built around action memos from DEPSECDEF and USD(A&T)
- Seven major action areas derived from the DEPSECDEF tasking for the Cross-Service Groups
- Amplify the guidance to provide:
  - Wording to apply the guidance to the T&E area and highlight specific effort required in T&E area
  - Add detail to define specific tasks and activities that need to be undertaken
  - Add schedule and milestones to show the effort that is planned by the T&E Cross-Service Group

SUMMARY OF ACTIONS

ACTION 1 Define bases and functions to be addressed

Have to do

ACTION 2 Develop the guidance that will be issued for the DoD Components to use while conducting their analyses

Have to do

Guidelines, standards, assumptions, measures of merit, data elements, and milestone schedule

ACTION 3 Provide oversight to DoD Components' analyses

ACTION 4 Identify outsourcing policies and make recommendations regarding these policies

Have to do

SUMMARY OF ACTIONS (cont.)

ACTION 5	Review excess capacity analyses
ACTION 6	Develop closure or realignment alternatives and numerical excess capacity reduction targets
ACTION 7	Analyze Cross-Service tradeoffs
	Review the results of DoD Component's analyses

ACTION PLAN MUST ADDRESS OTHER REQUIRED ACTIVITIES

- **COORDINATION** - Must coordinate with Laboratory Group, Depot Group, T&E Executive Agent, DoD Component groups performing the analyses
- **RECORD KEEPING** - Must comply with BRAC record keeping requirements
- **INTERNAL CONTROLS** - Must have internal control plan to ensure accuracy of data collection and analysis. Auditors must assess the plan for adequacy.

DISCUSSION QUESTIONS

- Scope of bases and facilities to be addressed
- Data elements, data call, and measures of merit to be common with the Laboratory Cross-Service Group
- Schedule for developing the closure and realignment alternatives
- Format for Action Plan submission

STRAWMAN MILESTONE SCHEDULE

DATE	MILESTONE
12 Jan 94	Group membership established
21 Jan	Action Plan and Milestones to USD(A&T)
	Record Plan for all records after 7 Jan 94
24-28 Jan	Report on Action Plan and Milestones to BRAC 95 Review Group
15 Feb	Internal Control Plan Approved
20 Feb	Receive input from T&E Board of Directors
1 Mar	Determine the common support functions and bases to be addressed by each cross-service group
1 Mar	Establish the guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for DoD Component analyses

STRAWMAN MILESTONE SCHEDULE (cont.)

DATE	MILESTONE
1 Mar	Identify necessary outsourcing policies and make recommendations regarding those policies
	Coordinate guidance with Laboratory Group
15 Mar	Report on Analysis Guidance to BRAC 95 Review Group
31 Mar	Issue BRAC 95 T&E Analysis Guidance
	Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses
1 Jun-30 Sep	Oversee DoD Component cross-service analyses of these common support functions
1 Jun	Review Interim DoD Component Reports

STRAWMAN MILESTONE SCHEDULE (cont.)

DATE	MILESTONE
1 Jul	Review Interim DoD Component Reports
1 Aug	Review Interim DoD Component Reports
30 Sep	Received Preliminary DoD Component Reports
	Review excess capacity analyses
	Analyze cross-service tradeoffs
15 Nov	Receive DoD Component Reports
15 Dec	Final T&E Report to BRAC Review Group

INFO only
Help.

PRELIMINARY ANALYSIS GUIDELINES, STANDARDS, ASSUMPTIONS, MEASURES OF MERIT, AND DATA ELEMENTS

This preliminary material is provided to be used by the T&E Joint Cross-Service Group to develop the analysis guidelines, standards, assumptions, measures of merit, and data elements that are to be part of the BRAC 95 analysis guidelines.

The review and analysis of the T&E facilities and bases has been a continuing activity over the last few years. The T&E Reliance activity was initiated in 1991 and resulted in corporate reviews aimed at identifying cross-service management arrangements for major classes of T&E facilities and any unwarranted duplication, and for developing plans for focused investments for the test capabilities of the future. In 1993, the oversight of the T&E facilities and bases was changes with the chartering of the Joint Service Board of Directors.

ANALYSIS GUIDELINES

In the course of the study and analysis, the Components need to consider the location of test facilities (i.e., capabilities) in addition to the location of installations (i.e., bases). While some bases have a primary mission of testing, there are many additional installations that have one or more facilities or capabilities that support the T&E mission. Bases in this second category will also be addressed by the study. The study should also evaluate each base and facility for its capability to satisfy requirements of all DoD Components, not just the host Component.

There are alternative sources for some test capabilities (i.e., NASA, other government agencies, industry) and these should be considered in the course of the assessment. In the case of bases that share restricted air or sea space, each of the bases should be considered as a separate entity and examined for opportunities to consolidate among the bases.

The study should examine actions to improve the efficiency of the core bases by (a) identifying the capacity of minimum core bases to accept additional functions, (b) consolidating activities to "must retain" core bases, and (c) identifying additional functions that should be considered for relocation to core bases.

BRAC 95 Joint Cross-Service Groups should, where operationally and cost effective, strive to retain in only one Service militarily unique capabilities used by two or more Services; consolidate workload across the Services to reduce capacity; and assign operational units from more than one Service to a single base.

DoD Components and BRAC 95 Joint Cross-Service Groups must develop one or more measures/factors for applying each of the final criteria to base structure analyses. While objective measures/factors are desirable, they will not always be possible to develop. Measures/factors may also vary for different categories of bases.

DoD Components and BRAC 95 Joint Cross-Service groups must document the measures and factors used for each of the final criteria.

GUIDELINES

High priority will be given to the retention of difficult to replace T&E assets, such as restricted land areas, airspace, and sea areas.

The analyses will recognize, where appropriate, the importance of adaptability to support of future technologies possessing larger footprints, higher performance, increased lethality, etc.

Consideration should be given to transferring responsibility to NASA or other government organizations those T&E facilities and installations where substantial commercial interest is thought to exist.

CATEGORIES OF BASES SUPPORTING TESTING

One of the first steps in evaluating the base structure for potential closures or realignments must involve grouping installations with like missions, capabilities, or attributes into categories, and when appropriate, subcategories. Categorizing bases is the necessary link between the forces described in the Force Structure Plan, programmed workload, and the base structure.

Determining categories of bases is a DoD Component and BRAC 95 Joint Cross-Service Group responsibility. DoD Components and BRAC 95 Joint Cross-Service Groups should avoid over-categorization in order to maximize opportunities for cross-service or intra-service tradeoffs.

As part of the analyses, all facilities and ranges used in supporting the test and evaluation mission are to be categorized into one of six bands. The six bands are:

Band 1 - Minimum Core Bases. This band will be used to identify test facilities or ranges located at bases or installations that manage the minimum core of DoD-owned or controlled test areas necessary to provide the required airspace, land space, and sea space to conduct realistic testing with sufficient safety footprints, security, terrain and climatic features, and environmental protection.

Band 2 - Immovable Test Facilities. The band includes test facilities or ranges at DoD bases that are essential to the conduct of DoD test mission and not duplicated elsewhere, and it is impractical or cost prohibitive to relocate the function elsewhere.

Band 3 - Testing Bases. Band 3 will include test facilities or ranges at bases with DoD airspace, land space, or sea space that could be moved or consolidated to a core base, but tat base should be preserved for training, surge, or other military application.

Band 4 - Additional Testing Bases. Band 4 includes test facilities and ranges at bases that should be retained to provide additional capacity to meet high priority DoD testing requirements, but are not critical during this period of drawdown.

Band 5 - Movable Test Facilities. Band 5 includes test facilities or ranges at a base or installation, but that location is not critical to the conduct of the test mission and the test facilities can be relocated or closed.

Band 6 - DoD-owned non-Based Facilities. This band will include facilities that belong the DoD, but are not located on a DoD-base or installation. Facilities in this band will be further sub-categorized using the definitions shown for Bands 1 through 5.

T&E MISSION AREAS

The T&E mission areas to be included in the analyses will be initially identified by the T&E Joint Cross-Service Group. As the DoD Components conduct their analyses and report progress to the group, it is appropriate for the Components to identify any recommended revisions to the mission area listing or definition. The final mission area listing will be agreed to prior to the completion of the Component analyses. The mission areas will include the areas that were previously used by the Components to formulate the draft Test Resources Master Plan (TRMP). These areas include:

Combat Areas
- Air Combat
- Land Combat
- Sea Combat
- Space and Ballistic Missile

Functional Areas
- Armament and Munitions
- Electronic Combat and Command, Control, Communications, and Intelligence
- Targets

The analyses must not develop so many categories for T&E facilities and basis that virtually every installation has something that it is "best" at. The analysis of installations/facilities should be addressed at a reasonable level of aggregation of test capability that allows some locations to be clearly, in aggregate, less valuable than others.

The analyses should attempt to "purify the categorization" of T&E installations and facilities. For example, should the 30th and 45th Space Wings still be justified on the basis of being "test" or should there be another alignment. Perhaps USD(A&T) should relinquish oversight of these installations to the space operations mission, with arrangements to buy back such support as is necessary to perform RDT&E of systems and equipment for which the space activities have a support capability. Similarly, AFWTF and AFFWC might be justified by the training community, with T&E buying support on an as required basis.

DATA ELEMENTS AND MEASURES OF MERIT

Each facility and base will be characterized by the following data elements.

- Range area (land, air, or sea area) controlled by or managed by the base
- Number of Civilian Personnel
- Number of Military Personnel
- Funding Levels (Institutional, Reimbursements)

Measures of merit will be identified for each T&E mission area.

- Uniqueness, is this facility a "National Asset" and the only one like it anywhere
- Total annual cost (direct and institutional, including associated BOS and RPM, regardless of who pays) per unit of output (flight test hour, cell hour, range hour, etc.). Determine the trend over time. Prepare an estimate for this parameter at the facility's full capacity.
- Proximity to related T&E capability, e.g., PRIMES, ECIT, or ACETEF.
- Availability of alternate sources of supply for the particular testing performed, i.e., another military test site or lab.
- Availability of alternate methods, i.e., modeling and simulation in lieu of part of the testing or use of demonstration by analysis.
- Potential for contracting out, to include both propriety and availability of facilities.
- Potential for privatizing the DoD activity, i.e., sell the facility to a private concern and buy back the testing services as needed.
- Ability to absorb additional work from other DoD, other government, or commercial sources.
- Ability to spread base operating and support costs across a wider base of mission activities, by hosting operating units or other RDT&E activities.
- "One-time" cost for MCP and O&M to bring Backlog of Maintenance and Repair to some specified, acceptable level and provide facilities that meet standards for each mission performed and satisfy quality of life objectives for military residents.

- Ratio of reimbursements to total cost of doing business, and the trend of this measure.

- Capacity utilization (and its trend), excess capacity (and its trend), alternative additional customers for capacity, cost of retention of excess capacity, cost avoidance (somewhere else) if workload is absorbed (from somewhere else), adaptability of capacity to other uses.

- Multipurpose test capability versus limited test capability (e.g., tests aircraft and weapons versus tests landing gear only).

CLOSURE OR REALIGNMENT ALTERNATIVES

The T&E Joint Group will develop a list of potential closure or realignment alternatives. Once these alternatives are identified, they will be evaluated by the Joint Group and provided to the DoD Components for inclusion in the Component's analysis. The following areas, while not all inclusive, will be considered by the T&E Joint Group for inclusion on the alternative list.

- Evaluate potential for consolidating all DoD flight test activities for high performance, fixed-wing aircraft and consolidating electronic combat test activities to fewer locations.

- Evaluate the use of single managers for test aircraft maintenance contracts, supply functions, technical support contracts, range equipment maintenance depots, or similar T&E support functions.

- Evaluate the divestiture from T&E of all base support functions where possible, resulting in T&E functions becoming tenants at most locations. Depend on operational force activities for base support functions to the maximum extent.

- Determine where NASA, DOE, DOT, and other federal activities can be used by DoD for T&E functions or where DoD can provide T&E services to other federal agencies.

- Determine if there are DoD test bases or facilities that should be transfer for operation to other federal activities, e.g., NASA, DOE, or DOT.

- Within DoD, determine where S&T laboratories or operational facilities can provide T&E services and result in reductions in the T&E infrastructure. Conversely, determine if T&E infrastructure can provide services that result in savings at other DoD locations.

- Determine the extent that other DoD functions can be moved to T&E installations resulting in fewer overall DoD facilities/installations. Consider movement of laboratories, depots, program offices, etc. to T&E installations.

Draft - January 18, 1994

ACTION PLAN AND MILESTONES

Test and Evaluation Joint Cross-Service Group

January 1994

Charles E. Adolph
Director
Test and Evaluation

Lee H. Frame
Acting Director
Operational Test and Evaluation

I. INTRODUCTION

In previous Base Realignment and Closures (BRAC) cycles, the analyses and development of recommendations for closures and realignments have been conducted within the DoD Components. As a result, it has been difficult for alternatives that involve "cross service" actions to receive full assessment. As part of the process for the BRAC 95 cycle, the DEPSECDEF has directed that strong attention be focused on examining the cross-service utilization of common support assets. Throughout the BRAC 95 analysis process, the DoD Components are to look for cross-service or intra-service opportunities to share assets and for opportunities to rely on a single Military Service for support in selected support areas.

The DEPSECDEF has also directed the formation of a number of Joint Cross-Service Groups, led by OSD representatives, to design the cross-service analysis approach in selected functional areas and to oversee the conduct of these analyses by the DoD Components. Test and evaluation (T&E) has been identified as one of the five functional areas that will be examined in the BRAC 95 cross-service analyses.

This action plan describes the actions and milestones for the BRAC 95 T&E Joint Cross-Service Group. Section II describes the membership of the group, the group's objectives, and the actions that are planned. Section IV contains tables with the milestones for the T&E groups activities.

II. PLAN OF ACTION

MEMBERSHIP

The BRAC 95 T&E Joint Cross-Service Group will be jointly chaired by the Director, Test and Evaluation (D,T&E) and the Director, Operational Test and Evaluation (D,OT&E). Members will be representatives from:

Army,
Navy,
Air Force,
Ballistic Missile Defense Organization,
Defense Nuclear Agency,
Joint Interoperability and Engineering Organization,
Director, Defense Research and Engineering, and
Deputy Assistance Secretary of Defense for Economic Reinvestment and BRAC .

Other offices will be included as considered appropriate by the chairpersons. The Heads of DoD Components will designate the individuals to serve as their representatives on the T&E Joint Group.

PURPOSE

The T&E Joint Cross-Service Group was established by the Deputy Secretary of Defense to:

- Determine the common support functions and bases to be addressed by the T&E cross-service analyses;
- Establish the guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for DoD Component conduct of cross-service analyses of the T&E function;
- Oversee DoD Component cross-service analyses of T&E functions;
- Identify necessary outsourcing policies and make recommendations regarding those policies;
- Review excess capacity analyses;
- Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses; and
- Analyze cross-service tradeoffs.

ACTIONS

The T&E Joint Cross Service Group will perform actions that directly relate to the purpose described above. It is anticipated that the T&E Joint Group will consider a broad range of factors which include structural changes, organizational changes, and operational changes. The following paragraphs summarize the actions that the group will undertake during the BRAC 95 activity.

ACTION 1: Determine the common support functions and bases to be addressed by the T&E Cross-Service Group. The T&E Joint Group will define the scope of functions and bases to be addressed by the T&E cross-service activity. A statement will be developed that will define the facilities and bases to be addressed by the DoD Component's T&E analyses.

The T&E Joint Group will develop a preliminary listing of all DoD facilities construed to be "T&E" facilities. Within this listing, consideration will be given to those T&E facilities that are located at bases outside the Major Range and Test Facility Base (MRTFB). This listing will be developed from the group's definition of T&E bases and facilities and will use inputs provided by the representative of each DoD Component.

After the DoD Components initiate their analyses, one of the first steps will be the examination of the preliminary listing to complete the identification of the specific functions and bases to be included in the T&E cross-service analyses. Each component will construct such a listing with supporting rationale and present this information in the first progress report to the T&E Joint Group.

ACTION 2: Establish the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of the common support functions. The T&E Joint Group will develop these analyses criteria and issue them as guidance to the DoD Components. The guidance will include the following topics:

- General statement of the objectives of these analyses in the T&E support area.
- Process to be used to complete the identification and listing of the specific functions and bases to be included in the T&E cross-service analyses
- Criteria and process to be used to group bases, facilities, and installations into categories of bases and into T&E mission areas. A list of T&E mission areas will be developed to be considered in the Component analyses.
- Guidelines for the conduct of the analyses. The guidelines will provide a summary of the new challenges facing the Department and the national priorities that have been stated for DoD.
    - Economic Security
    - Dual Use of Technologies and Facilities
    - National Military Strategy
    - Bottom-Up Review
    - President's Technology Panel

Standards:

- Standards for the designation of a base or facility as a "T&E" facility will be developed.
- Standards for designation of a T&E base or facility as a "Cross-Service" support facility will be developed. Measures of merit, discussed below, will be developed to define the level of cross-service activity that is required to include the base or facility in the Cross-Service analysis.

Assumptions:

- It the purpose of the BRAC 95 review is to reduce the number of bases and to improve the alignment of other bases and facilities to provide the minimum required DoD infrastructure at a reduced operating cost.

- The savings to be realized in BRAC 95 may be realized in a number of manners.

  - the maximum savings will be achieved by closing a complete installation, deactivating all the mission and support activities, and terminating the assigned missions (i.e., get by without the output the installation was providing).

  - The next highest level of savings is achieved by closing the installation, deactivating all mission and support activities, and absorbing some (or all) of the mission workload at other installations.

  - Generally speaking, closing a few facilities on a larger installation that continues to operate saves very little in terms of continuing operations and maintenance costs.

  - Generally speaking, closing an installation but moving the units to a different, existing installation tends to save little over the long haul, unless the infrastructure necessary to beddown and support the arriving unit already exist and will be available at the gaining installation.

- Additional assumptions that will be considered in the Component's analyses. The assumptions will address:

  - The basis for projecting the T&E workload for the bases and facilities being analyzed.

  - Any simplifying assumptions that are used to aid in the completion of the required analyses.

Measures of Merit:

- Measures of merit will be developed by the T&E Joint Group. Additional measures of merit may be determined in the course of the Component analyses. If possible, the measures of merit should be objective measures. The measures of merit will include:

  - measures that will be applied to each and every T&E base or facility

  - measures that are applicable to only to selected T&E mission areas.

  - measures will address range and facility capacity, current and projected workload, excess capacity, mission operating costs, and support costs.

Data elements:

- Data elements needed to support the measures of merit will be developed by the T&E Joint Group.

Milestone schedule:

- Milestone schedule for the Component analyses and reports to the T&E Joint Group is incorporated in the schedule shown in Section III.

ACTION 3: Oversee DoD Component cross-service analyses of these common support functions. After the T&E Joint Group issues the analysis guidance to the DoD Components, the Components will conduct the analyses of the T&E facilities and bases. During this analysis period, the T&E Joint Group will periodically review the DoD Component activity and progress. The schedule for these interim reviews is shown in the milestone schedule in section III. Following the completion of the Component analyses, the result will be presented to the T&E Joint Cross-Service Group for their review and evaluation.

ACTION 4: Identify necessary outsourcing policies and make recommendations regarding those policies. While outsourcing is a viable and important option for some DoD common support functions, there is a more limited application of this alternative to the Test and Evaluation area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing.

The T&E Joint Group will develop a statement of policy that will place a limit on the analyses of outsourcing alternatives to be examined. The reason for placing a limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only outsourcing alternatives for most T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA. In addition to this limitation statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

The T&E Joint Group will address the issue of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. (For example, what guidelines should exist for future decisions concerning whether the government should maintain a test facility because of a projected potential future need versus relying on contracting for the prime contractor for a new weapon providing the developmental testing facilities as part of the contract cost.)

ACTION 5: Review excess capacity analyses. After the Components have delivered the preliminary results of their analyses, the T&E Joint Group will identify those analyses that highlight the existence or the forecast of excess capacity. The bases and facilities that were evaluated in these analyses will be reviewed to verify the accuracy of the data available and the consistency of the assumptions made. The analyses will be validated against the analysis guidance issued by the T&E Joint Group.

ACTION 6: Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses. The representatives to the T&E Joint Group will propose a list of potential closure or realignment alternatives. These alternatives will be preliminarily evaluated by the

T&E Joint Group and, if deemed appropriate, provided to the DoD Components for full evaluation as part of the Component's analyses.

The group will identify numerical targets for reduction of excess capacity. These targets will be difficult to develop in a generic manner since the capabilities, capacity, and workload at the various T&E facilities and bases vary widely and are difficult to compare. Consideration will be given to developing these targets in each of the T&E mission areas.

ACTION 7: Analyze cross-service tradeoffs. During the analyses by the DoD Components, the T&E Joint Group will periodically conduct reviews of the Component activity and progress (ACTION 3). At the conclusion of the Component analyses, the preliminary results of the analyses in the T&E area will be reviewed by the T&E Joint Group. Any inconsistencies or conflicts between the analyses performed and the analyses guidance that was issued will be identified.

COORDINATION

In pursuing their BRAC 95 work, all of the joint groups and the DoD Components will coordinate with each other and should take into account other analyses or studies external to the BRAC process which may impact their deliberations. The T&E Joint Cross-Service Group will closely coordinate its activity with the Joint Cross-Service Group for Laboratories. The T&E Joint Group will also consider inputs from the Test and Evaluation Executive Agent Board of Directors and coordinate its activities with the Board of Directors.

RECORD KEEPING

The chairs of the T&E Joint Group shall establish from members of their own staffs, a secretariat for the group. The secretariat shall be led by the Deputy Director, Test Facilities and Resources, (D,T&E), and the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Descriptions of how base realignment and closure policies, analyses and recommendations were made, including minutes of all deliberative meetings;
- All policy, data, information, and analyses considered in making base realignment and closure recommendations;
- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and
- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

INTERNAL CONTROLS

The T&E Joint Cross-Service Group must develop and implement an internal control plan for base realignment, closure or consolidation studies to ensure the accuracy of data collection and analyses.

At a minimum, this internal control plan will include:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

III. MILESTONES

The following table summarizes the milestones for the T&E Joint Cross-Service Group activity.

TABLE III-1 - MILESTONES

ACTION	MILESTONE	DUE DATE	ACTUAL DATE
	Group membership established	12 Jan 94	
	Develop Action Plan and Milestones	21 Jan	
	Report on Action Plan and Milestones to BRAC 95 Review Group	24-28 Jan	
	Internal Control Plan Approved	15 Feb	
	Receive input from T&E Board of Directors	20 Feb	
1	Determine the common support functions and bases to be addressed by each cross-service group	31 Jan	
2	Establish the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of the common support functions	1 Mar	
4	Identify necessary outsourcing policies and make recommendations regarding those policies	1 Mar	
	Report on Analysis Guidance BRAC 95 Review Group	15 Mar	

TABLE III-1 - MILESTONES

ACTION	MILESTONE	DUE DATE	ACTUAL DATE
	Issue BRAC 95 T&E Analysis Guidance	31 Mar	
6	Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses		
3	Oversee DoD Component cross-service analyses of these common support functions		
	Review Interim DoD Component Reports	1 Jun	
	Review Interim DoD Component Reports	1 Aug	
	Final Mission-Area List Approved	1 Sep	
	Received Preliminary DoD Component Reports	30 Sep	
5	Review excess capacity analyses		
7	Analyze cross-service tradeoffs.		
	Receive DoD Component Reports	15 Nov	
	Final T&E Report to BRAC Review Group	15 Dec	

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, January 25, 1994

Minutes

The second meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, January 25, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The meeting opened with Mr. Frame outlining the agenda items to cover at today's meeting. The agenda included: (1) a review of the draft action plan and milestones; (2) consideration of adding a representative from the DoDIG and OSD Comptroller to the group; (3) the meeting schedule; (4) the use of the Reliance study; (5) assigning action items to group members; and (6) presentation of the action plan to the Steering Group.

After handing out the revised draft action plan and milestone schedule (attached), a discussion began on what part the Test and Evaluation Board of Directors will play in this phase of the BRAC 95 process. Three areas where the Group felt the need for the Board's expertise are in defining functions and bases to consider, the development of outsourcing policy, and assistance in designing measures of merit, guidelines, assumptions, and categories. The issue of whether the Board will do data collecting arose. The chairmen understood that since data used in the BRAC process must be certified, the Board may provide suggestions for T&E policy directives/guidance. The Group will handle the means for data collecting.

The milestone schedule was then addressed by the group. It was suggested that at third column be added later that would spell out whom would perform/lead each of the milestone tasks. Each item was discussed for relevancy and edits made. The edits would be submitted to the Steering Group prior to the January 28, 1994, BRAC 95 Review Group meeting.

The Action Plan was the next item discussed among the Group. The comments received from the Group members after the January 18, 1994, meeting were incorporated into this draft. There was a question about why some comments were not put into the new draft. The Group agreed to review any comments, included or excluded, that needed clarification or further agreement. The Group subsequently approved all edits to the action plan that would be forwarded to the Steering Group.

The next agenda item discussed pertained to additional membership to the T&E Joint Cross-Service Group. The DoDIG and Comptroller requested to have a representative sit on the Group. The chairmen asked the members whether they thought the Group should be expanded to include representatives of other

organizations. After a brief discussion, it was agreed that the Group, as constituted, contained all representation directed by the Under Secretary of Defense (A&T) guidance memorandum of January 3, 1994, and the Deputy Secretary of Defense guidance memorandum of January 7, 1994, and the Group should continue with its present membership.

A brief discussion then took place as to scheduling of future meetings. The Group agreed to keep every Tuesday at 0900 as the standard meeting time, unless notified otherwise.

Discussion then ensued on the use of the Reliance study in the Group's decision making process. Concerns arose as to what exactly would be used from the Reliance study since this document is not based on certified data. The Group decided that only the structure of the Reliance databases would be applicable since it would help in defining the "universe." The study further helps to identify the capabilities of T&E functions and not where facilities are or where they should go. Data calls can be created to fill in this data at a later time.

The chairmen then asked the Services to look at the Reliance study structure and provide a draft structure that goes beyond the Major Ranges and Test Facilities Base (MRTFB) identified in the study. This list will then be disseminated to the Joint Cross-Service Groups on Laboratories and Depot Maintenance to ensure coordination.

The final agenda item discussed was the assignment of milestone tasks to Group members.

- Mr. Boyles agreed to create a strawman of functions and bases and distribute to the Services by close of business January 26, 1994, for their input/discussion at the next meeting.

- The Service and Defense Agency representatives will provide a draft measures of merit/standards by February 4, 1994, for Group discussion on February 8.

- Mr. Boyles, with Service input, will provide a draft internal control plan and outsourcing policy by February 4, 1994. Distribution will be made later to the T&E Board of Directors and Joint Cross-Service Groups on Laboratories and Depot Maintenance.

- Mr. Boyles will draft suggested data elements and data management procedures by February 11, 1994, for discussion at the February 15 meeting.

- Comments on the outsourcing policy from Joint Cross-Service Groups on Laboratories and Depot Maintenance are requested to Mr. Boyles by February 18, 1994.

The chair then asked if there were any other topics to discuss. The use of contractors in support of this Group was brought up for discussion. The Group agreed to table this until an internal control plan is drafted and discussed.

The meeting adjourned at 1010.

Approved: Lee Frame, Co-Chairman; John Bolino, Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

January 25, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Co-Chair
Mr. Irv Boyles, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Mr. Parker Horner, Air Force
Mr. John Gehrig, Army
LTC Dave Powell, Army TABS
Mr. Gerry Schiefer, Navy
CAPT Dave Rose, Navy
COL Tom Baker, OSD DISA
Dr. Don Linger, OSD Defense Nuclear Agency
Mr. Michael McAndrew, ODASD(ER&BRAC) BCU
Ms. Kathleen Ruemmele, BMDO
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E

Draft - January 24, 1994

ACTION PLAN AND MILESTONES

Test and Evaluation Joint Cross-Service Group

January 1994

Charles E. Adolph
Director
Test and Evaluation

Lee H. Frame
Acting Director
Operational Test and Evaluation

I. INTRODUCTION

In previous Base Realignment and Closures (BRAC) cycles, the analyses and development of recommendations for closures and realignments have been conducted within the DoD Components. As a result, it has been difficult for alternatives that involve "cross service" actions to receive full assessment. As part of the process for the BRAC 95 cycle, the DEPSECDEF has directed that strong attention be focused on examining the cross-service utilization of common support assets. Throughout the BRAC 95 analysis process, the DoD Components are to look for cross-service or intra-service opportunities to share assets and for opportunities to rely on a single Military Service for support in selected support areas.

The DEPSECDEF has also directed the formation of a number of Joint Cross-Service Groups, led by OSD representatives, to design the cross-service analysis approach in selected functional areas and to oversee the conduct of these analyses by the DoD Components. Test and evaluation (T&E) has been identified as one of the five functional areas that will be examined in the BRAC 95 cross-service analyses.

This action plan describes the actions and milestones for the BRAC 95 T&E Joint Cross-Service Group. Section II describes the membership of the group, the group's objectives, and the actions that are planned. Section III contains tables with the milestones for the T&E group's activities.

II. PLAN OF ACTION

MEMBERSHIP

The BRAC 95 T&E Joint Cross-Service Group will be jointly chaired by the Director, Test and Evaluation (D,T&E) and the Director, Operational Test and Evaluation (D,OT&E). Members will be representatives from:

Army,
Navy,
Air Force,
Ballistic Missile Defense Organization,
Defense Nuclear Agency,
Joint Interoperability and Engineering Organization,
Director, Defense Research and Engineering,
Deputy Assistance Secretary of Defense for Economic Reinvestment and BRAC, and
Director (PA&E).

Other offices will be included as considered appropriate by the chairpersons. The Heads of DoD Components will designate the individuals to serve as their representatives on the T&E Joint Group.

PURPOSE

The T&E Joint Cross-Service Group was established by the Deputy Secretary of Defense to:

- Determine the common support functions and bases to be addressed by the T&E cross-service analyses;
- Establish the guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for DoD Component conduct of cross-service analyses of the T&E function;
- Oversee DoD Component cross-service analyses of T&E functions;
- Identify necessary outsourcing policies and make recommendations regarding those policies;
- Review excess capacity analyses;
- Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses; and
- Analyze cross-service tradeoffs.

The DoD Components will conduct analyses in accordance with the guidelines provided by the T&E Joint Cross-Service Group.

ACTIONS

The T&E Joint Cross Service Group will perform actions that directly relate to the purpose described above as identified in DEPSECDEF memorandum: "1995 Base Realignments and Closures (BRAC 95)," dated 7 January 1994. It is anticipated that the T&E Joint Group will consider a broad range of factors which include structural changes, organizational changes, and operational changes. The following paragraphs summarize the actions that the group will undertake during the BRAC 95 activity.

ACTION 1: Determine the common support functions and bases to be addressed by the T&E Cross-Service Group. The T&E Joint Group will define the scope of functions and bases to be addressed by the T&E cross-service activity. The T&E Joint Group will develop a preliminary listing of all DoD facilities determined to support T&E. Within this listing, consideration will be given to those T&E facilities that are located at bases outside the Major Range and Test Facility Base (MRTFB), including laboratory and depot maintenance facilities. The current efforts from T&E Project Reliance will provide a baseline from which to proceed. From this set of facilities supporting T&E, the T&E Group will develop a functional list of subsets that will be considered for BRAC 95.

ACTION 2: Establish the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of the common support functions. The T&E Joint Group will develop analyses criteria and issue guidance to the DoD Components. The guidance will include the following topics:

Guidelines:

- General statement of the objectives of analyses in the T&E support area.
- Criteria and process to be used to group bases, facilities, and installations into categories of bases and into T&E mission areas, to include laboratory and depot maintenance facilities as appropriate to performing the T&E mission..
- Guidelines for the conduct of the analyses.

Standards:

- Standards for the designation of a facility as a "T&E facility" for consideration in analyses.

Assumptions:

- Bases and facilities closed under previous BRAC actions will not be considered.
- Budget, technology, and threat trends that drive workload.

Measures of Merit:

- Measures of merit will be developed by the T&E Joint Group. Additional measures of merit may be determined in the course of the Component analyses in conjunction with the Components' BRAC teams. The measures of merit will address common measures to be applied to each DoD component's facilities.

Data elements:

- Data elements needed to support the analyses by the Components will be developed by the T&E Joint Group.

- Where feasible, common data elements with laboratory and depot maintenance group will be sought.

Milestone schedule:

- Milestone schedule for the Component analyses and reports to the T&E Joint Group is incorporated in the schedule shown in Section III. Actions by the T&E Join Group to be accomplished by 31 March 1994 are emphasized.

ACTION 3: Oversee DoD Component cross-service analyses of these common support functions. From the analysis guidnace provided by the T&E Cross-Service Group, the DoD Components, the Components will conduct the analyses of the T&E facilities and bases under the auspices of the T&E Executive Agent Board of Directors. During this analysis period, the T&E Joint Group will periodically review the DoD Component activity and progress. Following the completion of the Component analyses, the results will be presented to the T&E Joint Cross-Service Group for their review and evaluation.

ACTION 4: Identify necessary outsourcing policies and make recommendations regarding those policies. The T&E Joint Group will develop a statement of policy that will place a limit on the analyses of outsourcing alternatives to be examined. The T&E Joint Group will address the issue of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. Conversion of existing government own and operated facilities to government owned contractor operated (GOCO) will also be investigated to determine potential for advantages to the government.

ACTION 5: Review excess capacity analyses. Where feasible, definitions and records from the Range Utilization Measurement System (RUMS), will be used to look at capacity of T&E facilities. After the Components have delivered the preliminary results of their analyses, the T&E Joint Group will identify those analyses that highlight the existence or the forecast of excess capacity. The bases and facilities that were evaluated in these analyses will be reviewed to verify the accuracy of the data available and the consistency of the assumptions made. The Component analyses will be certified by the T&E Executuve Agent Board of Directors, and reviewed and validated against the analysis guidance by the T&E Joint Group.

ACTION 6: Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses. The T&E Joint Group will propose a list of potential closure or realignment alternatives, to include consideration of recommendations of the T&E Executive Board of Directors. The group will identify numerical targets for reduction of excess capacity. These targets will consider generic capabilities, capacity, and workload at the various T&E facilities and bases. Consideration will be given to developing these targets in each of the T&E mission areas.

ACTION 7: Analyze cross-service tradeoffs. During the analyses by the DoD Components, the T&E Joint Group will periodically conduct reviews of the Component activity and progress (ACTION 3), and consider the recommendations of the T&E Executive Agent Board of Directors. At the conclusion of the Component analyses, the preliminary results of the analyses in the T&E area will be reviewed by the T&E Joint Group. Any inconsistencies or conflicts between the analyses performed and the analyses guidance that was issued will be identified.

COORDINATION

In pursuing their BRAC 95 work, all of the joint groups and the DoD Components will coordinate with each other and should take into account other analyses or studies external to the BRAC process which may impact their deliberations. The T&E Joint Cross-Service Group will closely coordinate its activity with the Joint Cross-Service Group for Laboratories, and the Group for Depot Maintenance. The T&E Joint Group will also consider inputs from the Test and Evaluation Executive Agent Board of Directors and coordinate its activities with the Board of Directors.

RECORD KEEPING

The chairs of the T&E Joint Group shall establish from members of their own staffs, a secretariat for the group. The secretariat shall be led by the Deputy Director, Test Facilities and Resources, (D,T&E), with close coordination with the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Minutes of meetings will be kept by the respresentative from the DASD(Economic Reinvestment and BRAC), and will not be circulated. Coordination by DT&E and DOT&E will be required as a minimum.

- Descriptions of how base realignment and closure policies, guidance, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

The secretariat will all develop strawman material for use by the group as directed by the co-Chairs of the Group.

INTERNAL CONTROLS

The T&E Joint Cross-Service Group must develop and implement an internal control plan for base realignment, closure or consolidation studies to ensure the accuracy of data collection and analyses.

At a minimum, this internal control plan will include:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures for safeguarding and handling data, including its configuration control;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

III. MILESTONES

The following table summarizes the milestones for the T&E Joint Cross-Service Group activity. Table III-1 identifies the actions to achieve the 31 March 1994 major milestone for issueing guidance to the Components. Table III-2 identifies events to be accomplished by the Components.

TABLE III-1 - MILESTONES (TO 31 March 1994)

ACTION	MILESTONE	DUE DATE	ACTUAL DATE
	Group membership established	12 Jan 94	12 Jan
	Formation Meeting	18 Jan	18 Jan
	Develop Action Plan and Milestones	24 Jan	24 Jan
	Group Approval of Action Plan	25 Jan	
	Report on Action Plan and Milestones to BRAC 95 Steering Group	26 Jan	
	Action Plan to BRAC 95 Steering Group	28 Jan	
	Group Review of draft Internal Control Plan, RUMS, potential facility universe, outsourcing policy, potential data elements, and data management procedures	8 Feb	
	Group consensus from 8 Feb meeting	15 Feb	
	Receive input from T&E Board of Directors	22Feb	
1	Determine the common support functions and bases to be addressed by lab and depot maint. cross-service groups	28 Feb	
2	Draft the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of the common support functions by Group	8 Mar	
	Finalize all documentation for BRAC 95 Steering Group Review	15 Mar	
4	Identify necessary outsourcing policies and make recommendations regarding those policies	15 Mar	
	Finalize per Steering Group inputs	25 Mar	
	Issue to DoD Components	31 Mar	

TABLE III-2 - MILESTONES (Component Analyses)

ACTION	MILESTONE	DUE DATE	ACTUAL DATE
	Issue BRAC 95 T&E Analysis Guidance (OSD)	31 Mar 94	
3	Oversee DoD Component cross-service analyses of these common support functions	Apr - Sep	
6	Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses	Jun	
	Review Interim DoD Component Reports	1 Jun	
	Review Interim DoD Component Reports	1 Aug	
	Final Mission-Area List Approved	1 Sep	
	Review Preliminary DoD Component Reports	30 Sep	
5	Review excess capacity analyses	30 Sep	
7	Review cross-service tradeoffs.	30 Sep	
	Receive DoD Component Reports	15 Nov	
	Final T&E Report to BRAC Review Group	15 Dec	

Delete.

Draft - January 24, 1994

ACTION PLAN AND MILESTONES

Test and Evaluation Joint Cross-Service Group

January 1994

Charles E. Adolph
Director
Test and Evaluation

Lee H. Frame
Acting Director
Operational Test and Evaluation

I. INTRODUCTION

In previous Base Realignment and Closures (BRAC) cycles, the analyses and development of recommendations for closures and realignments have been conducted within the DoD Components. As a result, it has been difficult for alternatives that involve "cross service" actions to receive full assessment. As part of the process for the BRAC 95 cycle, the DEPSECDEF has directed that strong attention be focused on examining the cross-service utilization of common support assets. Throughout the BRAC 95 analysis process, the DoD Components are to look for cross-service or intra-service opportunities to share assets and for opportunities to rely on a single Military Service for support in selected support areas.

The DEPSECDEF has also directed the formation of a number of Joint Cross-Service Groups, led by OSD representatives, to design the cross-service analysis approach in selected functional areas and to oversee the conduct of these analyses by the DoD Components. Test and evaluation (T&E) has been identified as one of the five functional areas that will be examined in the BRAC 95 cross-service analyses.

This action plan describes the actions and milestones for the BRAC 95 T&E Joint Cross-Service Group. Section II describes the membership of the group, the group's objectives, and the actions that are planned. Section III contains tables with the milestones for the T&E group's activities. ~~Section IV contains tables with the milestones for the T&E groups activities.~~

II. PLAN OF ACTION

MEMBERSHIP

The BRAC 95 T&E Joint Cross-Service Group will be jointly chaired by the Director, Test and Evaluation (D,T&E) and the Director, Operational Test and Evaluation (D,OT&E). Members will be representatives from:

Army,
Navy,
Air Force,
Ballistic Missile Defense Organization,
Defense Nuclear Agency,
Joint Interoperability and Engineering Organization,
Director, Defense Research and Engineering,
Deputy Assistance Secretary of Defense for Economic Reinvestment and BRAC, and
Director (PA&E). ~~and~~
~~Deputy Assistance Secretary of Defense for Economic Reinvestment and BRAC.~~

Other offices will be included as considered appropriate by the chairpersons. The Heads of DoD Components will designate the individuals to serve as their representatives on the T&E Joint Group.

PURPOSE

The T&E Joint Cross-Service Group was established by the Deputy Secretary of Defense to:

- Determine the common support functions and bases to be addressed by the T&E cross-service analyses;
- Establish the guidelines, standards, assumptions, measures of merit, data elements, and milestone schedules for DoD Component conduct of cross-service analyses of the T&E function;
- Oversee DoD Component cross-service analyses of T&E functions;
- Identify necessary outsourcing policies and make recommendations regarding those policies;
- Review excess capacity analyses;
- Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses; and
- Analyze cross-service tradeoffs.

The DoD Components will conduct analyses in accordance with the guidelines provided by the T&E Joint Cross-Service Group.

ACTIONS

The T&E Joint Cross Service Group will perform actions that directly relate to the purpose described above as identified in DEPSECDEF memorandum: "1995 Base Realignments and Closures (BRAC 95)," dated 7 January 1994. ~~The T&E Joint Cross Service Group will perform actions that directly relate to the purpose described above.~~ It is anticipated that the T&E Joint Group will consider a broad range of factors which include structural changes, organizational changes, and operational changes. The following paragraphs summarize the actions that the group will undertake during the BRAC 95 activity.

ACTION 1: Determine the common support functions and bases to be addressed by the T&E Cross-Service Group. The T&E Joint Group will define the scope of functions and bases to be addressed by the T&E cross-service activity. The T&E Joint Group will develop a preliminary listing of all DoD facilities determined to support T&E. ~~A statement will be developed that will define the facilities and bases to be addressed by the DoD Component's T&E analyses.~~

~~The T&E Joint Group will develop a preliminary listing of all DoD facilities construed to be "T&E" facilities.~~ Within this listing, consideration will be given to those T&E facilities that are located at bases outside the Major Range and Test Facility Base (MRTFB), including laboratory and depot maintenance facilities. The current efforts from T&E Project Reliance will provide a baseline from which to proceed. From this set of facilities supporting T&E, the T&E Group will develop a functional list of subsets that will be considered for BRAC 95. ~~consideration will be given to those T&E facilities that are located at bases outside the Major Range and Test Facility Base (MRTFB). This listing will be developed from the group's definition of T&E bases and facilities and will use inputs provided by the representative of each DoD Component.~~

~~After the DoD Components initiate their analyses, one of the first steps will be the examination of the preliminary listing to complete the identification of the specific functions and bases to be included in the T&E cross service analyses. Each component will construct such a listing with supporting rationale and present this information in the first progress report to the T&E Joint Group.~~

ACTION 2: Establish the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of the common support functions. The T&E Joint Group will develop analyses criteria and issue guidance to the DoD Components. ~~The T&E Joint Group will develop these analyses criteria and issue them as guidance to the DoD Components.~~ The guidance will include the following topics:

Guidelines:

- General statement of the objectives of analyses in the T&E support area.
- ~~General statement of the objectives of these analyses in the T&E support area.~~

- ~~Process to be used to complete the identification and listing of the specific functions and bases to be included in the T&E cross service analyses~~

- Criteria and process to be used to group bases, facilities, and installations into categories of bases and into T&E mission areas, to include laboratory and depot maintenance facilities as appropriate to performing the T&E mission..

~~and installations into categories of bases and into T&E mission areas. A list of T&E mission areas will be developed to be considered in the Component analyses.~~

- Guidelines for the conduct of the analyses.

~~The guidelines will provide a summary of the new challenges facing the Department and the national priorities that have been stated for DoD.~~

~~Economic Security~~
~~Dual Use of Technologies and Facilities~~
~~National Military Strategy~~
~~Bottom Up Review~~
~~President's Technology Panel~~

Standards:

- Standards for the designation of a facility as a "T&E facility" for consideration in analyses.
- ~~Standards for the designation of a base or facility as a "T&E" facility will be developed.~~

- ~~Standards for designation of a T&E base or facility as a "Cross Service" support facility will be developed. Measures of merit, discussed below, will be developed to define the level of cross service activity that is required to include the base or facility in the Cross Service analysis.~~

Assumptions:

- Bases and facilities closed under previous BRAC actions will not be considered.

- Budget, technology, and threat trends that drive workload.
- ~~It the purpose of the BRAC 95 review is to reduce the number of bases and to improve the alignment of other bases and facilities to provide the minimum required DoD infrastructure at a reduced operating cost.~~

- ~~The savings to be realized in BRAC 95 may be realized in a number of manners.~~

  ~~the maximum savings will be achieved by closing a complete installation, deactivating all the mission and support activities, and terminating the assigned missions (i.e., get by without the output the installation was providing).~~

  ~~The next highest level of savings is achieved by closing the installation, deactivating all mission and support activities, and absorbing some (or all) of the mission workload at other installations.~~

  ~~Generally speaking, closing a few facilities on a larger installation that continues to operate saves very little in terms of continuing operations and maintenance costs.~~

  ~~Generally speaking, closing an installation but moving the units to a different, existing installation tends to save little over the long haul, unless the~~

~~infrastructure necessary to beddown and support the arriving unit already exist and will be available at the gaining installation.~~

- ~~Additional assumptions that will be considered in the Component's analyses. The assumptions will address:~~

  - ~~The basis for projecting the T&E workload for the bases and facilities being analyzed.~~

  - ~~Any simplifying assumptions that are used to aid in the completion of the required analyses.~~

Measures of Merit:

- Measures of merit will be developed by the T&E Joint Group. Additional measures of merit may be determined in the course of the Component analyses in conjunction with the Components' BRAC teams. The measures of merit will address common measures to be applied to each DoD component's facilities. ~~Additional measures of merit may be determined in the course of the Component analyses. If possible, the measures of merit should be objective measures. The measures of merit will include:~~

  - ~~measures that will be applied to each and every T&E base or facility~~

  - ~~measures that are applicable to only to selected T&E mission areas.~~

  - ~~measures will address range and facility capacity, current and projected workload, excess capacity, mission operating costs, and support costs.~~

Data elements:

- Data elements needed to support the analyses by the Components will be developed by the T&E Joint Group.

- Where feasible, common data elements with laboratory and depot maintenance group will be sought. ~~• Data elements needed to support the measures of merit will be developed by the T&E Joint Group.~~

Milestone schedule:

- Milestone schedule for the Component analyses and reports to the T&E Joint Group is incorporated in the schedule shown in Section III. Actions by the T&E Join Group to be accomplished by 31 March 1994 are emphasized.

ACTION 3: Oversee DoD Component cross-service analyses of these common support functions. From the analysis guidnace provided by the T&E Cross-Service Group, the DoD Components, the Components will conduct the analyses of the T&E facilities and bases under the auspices of the T&E Executive Agent Board of Directors. ~~After the T&E Joint Group issues the~~

~~analysis guidance to the DoD Components, the Components will conduct the analyses of the T&E facilities and bases.~~ During this analysis period, the T&E Joint Group will periodically review the DoD Component activity and progress. ~~The schedule for these interim reviews is shown in the milestone schedule in section III.~~ Following the completion of the Component analyses, the results will be presented to the T&E Joint Cross-Service Group for their review and evaluation. ~~the result will be presented to the T&E Joint Cross-Service Group for their review and evaluation.~~

ACTION 4: Identify necessary outsourcing policies and make recommendations regarding those policies. The T&E Joint Group will develop a statement of policy that will place a limit on the analyses of outsourcing alternatives to be examined. The T&E Joint Group will address the issue of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. Conversion of existing government own and operated facilities to government owned contractor operated (GOCO) will also be investigated to determine potential for advantages to the government. ~~While outsourcing is a viable and important option for some DoD common support functions, there is a more limited application of this alternative to the Test and Evaluation area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system level testing.~~

~~The T&E Joint Group will develop a statement of policy that will place a limit on the analyses of outsourcing alternatives to be examined. The reason for placing a limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only outsourcing alternatives for most T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA. In addition to this limitation statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.~~

~~The T&E Joint Group will address the issue of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. (For example, what guidelines should exist for future decisions concerning whether the government should maintain a test facility because of a projected potential future need versus relying on contracting for the prime contractor for a new weapon providing the developmental testing facilities as part of the contract cost.)~~

~~THE FOLLOWING TEXT WAS MOVED~~

~~The group will identify numerical targets for reduction of excess capacity. These targets will be difficult to develop in a generic manner since the capabilities,~~
~~THE PRECEDING TEXT WAS MOVED~~

ACTION 5: Review excess capacity analyses. Where feasible, definitions and records from the Range Utilization Measurement System (RUMS), will be used to look at capacity of T&E facilities. ~~Review excess capacity analyses.~~ After the Components have delivered the preliminary results of their analyses, the T&E Joint Group will identify those analyses that highlight the existence or the forecast of excess capacity. The bases and facilities that were evaluated in these analyses will be reviewed to verify the accuracy of the data available and the consistency of the assumptions made.

The Component analyses will be certified by the T&E Executuve Agent Board of Directors, and reviewed and validated against the analysis guidance by the T&E Joint Group. ~~The analyses will be validated against the analysis guidance issued by the T&E Joint Group.~~

ACTION 6: Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses. The T&E Joint Group will propose a list of potential closure or realignment alternatives, to include consideration of recommendations of the T&E Executive Board of Directors. The group will identify numerical targets for reduction of excess capacity. These targets will consider generic capabilities, ~~The representatives to the T&E Joint Group will propose a list of potential closure or realignment alternatives. These alternatives will be preliminarily evaluated by the T&E Joint Group and, if deemed appropriate, provided to the DoD Components for full evaluation as part of the Component's analyses.~~ capacity, and workload at the various T&E facilities and bases, ~~and workload at the various T&E facilities and bases vary widely and are difficult to compare.~~ Consideration will be given to developing these targets in each of the T&E mission areas.

ACTION 7: Analyze cross-service tradeoffs. During the analyses by the DoD Components, the T&E Joint Group will periodically conduct reviews of the Component activity and progress (ACTION 3), and consider the recommendations of the T&E Executive Agent Board of Directors. ~~the T&E Joint Group will periodically conduct reviews of the Component activity and progress (ACTION 3).~~ At the conclusion of the Component analyses, the preliminary results of the analyses in the T&E area will be reviewed by the T&E Joint Group. Any inconsistencies or conflicts between the analyses performed and the analyses guidance that was issued will be identified.

COORDINATION

In pursuing their BRAC 95 work, all of the joint groups and the DoD Components will coordinate with each other and should take into account other analyses or studies external to the BRAC process which may impact their deliberations. The T&E Joint Cross-Service Group will closely coordinate its activity with the Joint Cross-Service Group for Laboratories, and the Group for Depot Maintenance. ~~The T&E Joint Cross-Service Group will closely coordinate its activity with the Joint Cross-Service Group for Laboratories.~~ The T&E Joint Group will also consider inputs from the Test and Evaluation Executive Agent Board of Directors and coordinate its activities with the Board of Directors.

RECORD KEEPING

The chairs of the T&E Joint Group shall establish from members of their own staffs, a secretariat for the group. The secretariat shall be led by the Deputy Director, Test Facilities and Resources, (D,T&E), with close coordination with the Deputy Director, ~~and the Deputy Director,~~ Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, ~~From the date of receipt of the DEPSECDEF BRAC 95 memorandum,~~ the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

* Minutes of meetings will be kept by the respresentative from the DASD(Economic Reinvestment and BRAC), and will not be circulated. Coordination by DT&E and DOT&E will be required as a minimum.

- Descriptions of how base realignment and closure policies, guidance, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

The secretariat will all develop strawman material for use by the group as directed by the co-Chairs of the Group.

INTERNAL CONTROLS

The T&E Joint Cross-Service Group must develop and implement an internal control plan for base realignment, closure or consolidation studies to ensure the accuracy of data collection and analyses.

At a minimum, this internal control plan will include:

- Uniform guidance defining data requirements and sources;

- Systems for verifying the accuracy of data at all levels of command;

- Documentation justifying changes made to data received from subordinate commands;

- Procedures for safeguarding and handling data, including its configuration control;

- Procedures to check the accuracy of the analyses made from the data; and

- An assessment by auditors of the adequacy of each internal control plan.

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE

19 JAN 1994

MEMORANDUM FOR: DIRECTOR, TEST AND EVALUATION
ACTING DIRECTOR, OPERATIONAL TEST AND EVALUATION

FROM: HQ USAF/TE
1650 Air Force Pentagon
Washington DC 20330-1650

SUBJECT: Recommended Changes to the BRAC 95 T&E Action Plan and Milestones (18 Jan 94 Draft) - ACTION MEMORANDUM

I would like to compliment your efforts on the subject Plan of Action and Milestones. It is a good effort and allows the BRAC T&E Cross-Service group to get a quick start on meeting our milestones. For POA&M purposes, I believe the plan is too detailed in some areas and hence limiting to the group's future work. I would suggest the plan be recast, taking into account the attached changes.

Air Force comments are made relative to the format proposed in the 18 Jan 94 Draft. Key among these comments is a greater role for the T&E Executive Agent Board of Directors; suggesting the addition of its expertise and visibility, as appropriate. The Air Force also recommends the deletion of pages 10 - 14, as this appears to pre-judge the position of the Cross-Service T&E review group.

My point of contact on this matter is Mr. Parker Horner, AF/TER, X36597.

HOWARD W. LEAF, Lt Gen USAF (Ret)
Director, Test and Evaluation

Attachment:
POA&M Comments

AF/TE Suggested Changes

ACTION PLAN AND MILESTONES
Test and Evaluation Joint Cross-Service Group

Page 1, INTRODUCTION: Add third sentence in paragraph three to explain Section III.

Page 2, under PURPOSE: Add second paragraph as follows:

The DoD Components will conduct analyses in accordance with the guidelines provided by the T&E Joint Cross-Service Group.

Page 3, under ACTION 1: Delete last sentence of first paragraph.

Change second paragraph to read:

The T&E Joint Group will develop a preliminary listing of all DoD facilities determined to support the conduct of T&E. Within this listing, consideration will be given to those facilities that are located at bases outside the Major Range and Test Facility Base (MRTFB). From this set of facilities supporting T&E, the T&E Joint Group will develop a functional list of subsets that will be considered for BRAC 95.

Delete all of paragraph 3.

Page 3, under ACTION 2: Delete second bullet.

Delete second sentence of third bullet.

Delete second sentence and five sub-bullets of fourth bullet.

Remainder of ACTION 2 should read:

Standards: i.e. the designation of a facility as a "Cross-Service" support facility.

Assumptions: e.g. reduction goals

Measures of Merit: e.g. utility to the government, technically unique, etc.

Data Elements: range and facility capacity, current and projected workload, excess capacity, mission operating costs, and support costs.

Milestone schedule: refinement of the milestone schedule in Section III.

Page 5, under ACTION 3: Change to read:

ACTION 3: Oversee DoD Component cross-service analyses of these common support functions. The T&E Joint Group will issue the analysis guidance to the DoD Components. The Components will conduct the analyses of the T&E facilities and bases under the auspices of the T&E Executive Agent Board of Directors. Following the completion of the Component analyses, the result will be presented to the T&E Joint Cross-Service Group for their review and evaluation.

Page 5, under ACTION 4: Change to read:

ACTION 4: Identify necessary outsourcing policies and make recommendations regarding those policies. The T&E Joint Group will develop a statement of policy that will place a limit on the analyses of outsourcing alternatives to be examined. The T&E Joint Group will address the issue of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. A key

consideration of outsourcing will be the role of the government versus the private sector in the conduct of T&E.

Page 5, under ACTION 5: Change the third sentence to read:

The Component analyses of these bases and facilities will be reviewed by the Executive Agent BoD to verify the accuracy of the data and the consistency with the guidance.

Page 5, under ACTION 6: Change to read:

ACTION 6: Develop closure or realignment alternatives and numerical excess capacity reduction targets for consideration in such analyses. The T&E Joint Group will propose a list of potential realignment and closure alternatives, based on Executive Agent BoD recommendations. Any additional alternatives will be coordinated with the BoD to ensure cohesive streamlining strategies.

Page 6, under ACTION 7: Add in second sentence after (ACTION 3): " and consider the recommendations of the Executive Agent BoD."

Page 6, under COORDINATION: Change last sentence to read:

To facilitate inter-Service coordination, the T&E Joint Group should take advantage of the expertise and visibility of the T&E Executive Agent Board of Directors and coordinate its activities with the BoD.

Page 6, under RECORD KEEPING: Suggest deleting the entire section except for one sentence on the role of the OSD BRAC representative as the record keeper.

Page 8, TABLE III-1: Change fifth entry to:

Coordinate and review activities with T&E Exec Agent BoD through mid-March.

Pages 10-14, Preliminary Analysis Guidelines, Standards, Assumptions, Measures of Merit, and Data Elements: Should be deleted, not necessary for this POA&M. I believe it is more appropriately cast as a white paper to be considered by the Cross-Service Group.

DEPARTMENT OF THE ARMY
OFFICE OF THE CHIEF OF STAFF
WASHINGTON, DC 20310-0200

REPLY TO
ATTENTION OF

19 JAN 1994

DACS-TE

MEMORANDUM FOR DIRECTOR TEST AND EVALUATION,
ATTN: MR. JOHN BOLINO, 3D1067,
UNDER SECRETARY OF DEFENSE
(ACQUISITION AND TECHNOLOGY),
3110 DEFENSE PENTAGON,
WASHINGTON, DC 20301-3110

SUBJECT: Comments on Draft Action Plan and Milestones, Test and Evaluation Joint Cross-Service Group

1. Reference draft action plan, DT&E, 18 Jan 94, subject: Action Plan and Milestone, Test and Evaluation Joint Cross-Service Group.

2. Per your request DACS-TE is providing the following comments to the referenced document.

a. Page 12, "T&E Mission Areas," paragraph 1, line 5, should read, "The mission areas will include the areas currently being used by the Test and Evaluation Executive Agent. These areas include:"

b. The following items should be added as additional categories under "Functional Areas." Their addition will result in a closer link between the BRAC 95 Test and Evaluation Steering Group and the Test and Evaluation Executive Agent.

<u>Functional Areas</u>
Electronic Combat
- Modeling and Simulation
- HITL/ISTF
- Open Air Range
- Synergistic Var
- Measurement (RCS)
- Measurement (EO/IR)

Munitions
- A/A, A/S, S/A
- S/S

Air Vehicles

Inertial Guidance

DACS-TE
Subject: Comments on Draft Action Plan and Milestones, Test and Evaluation Joint Cross-Service Group

Sled Tracks

Climatic Labs

Climatic Labs (Aero Htg)

Propulsion
(Air-Breathing)
(Non-Air-Breathing)

c. Page 13, "Data Elements and Measures of Merit," paragraph 2 add "Potential for encroachment, is facility's usage and potential for growth hampered by urban encroachment."

3. Point of contact for this action is MAJ Essex Fowlks, 695-8995

John F. Gehrig
Director, Test and Evaluation
Management Agency

III. MILESTONES

TABLE III - MILESTONES (TO 31 MARCH 1994)

MILESTONE	DUE DATE	ACTUAL DATE
Group membership established	12 Jan 94	12 Jan
Formation Meeting	18 Jan	18 Jan
Develop Action Plan and Milestones	24 Jan	24 Jan
Group Approval of action Plan	25 Jan	
Report on Action Plan and Milestones to BRAC 95 Steering Group	26 Jan	
Action Plan to BRAC 95 ~~Steering~~ Review Group	28 Jan	
Initial Draft of functions and bases to be addressed by T&E cross Service group. Provide to Board of Directors	1 Feb	
Draft Service recommendations for Measures of Merit, guidelines and assumptions available for review	4 Feb	
* Group Review of draft Internal Control Plan, ROMs, outsourcing policy Measures of Merit, guidelines and assumptions. Provide consensus to T&E Board of Directors.	8 Feb	
Board of Directors Comments on functions & bases	11 Feb	
* Final approval of Function and bases. Identify potential data elements ~~and~~ data management procedures.	15 Feb	
Comments on outsourcing policy Measures of Merit, guidelines and assumptions due from T&E Board of Directors	18 Feb	
* Final approval of Measures of Merit guidelines and assumptions.	22 Feb	
* Complete Internal Management Control Plan. Consensus on required data elements and data management procedures	1 Mar	
* Complete action on outsourcing policy	8 Mar	
* Finalize all documentation for BRAC 95 Steering Group Review	15 Mar	
Identify necessary outsourcing policies and make recommendations regarding those policies	15 Mar	
Finalize per steering Group inputs	25 Mar	
Issue to DoD Components	31 Mar	

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, February 1, 1994

Minutes

The third meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, February 1, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The first item on the agenda was a review of the results of the BRAC 95 Review Group meeting held on January 28, 1994. Contractor involvement in the Cross-Service Group's activities was an item of concern to a number of the members. The Group was told that the Chairman of the BRAC 95 Review Group did not object to the use of Federally Funded Research and Development Centers (FFRDC). The use of an FFRDC, and the extent to which they would be used, was a decision to be made by the individual Cross-Service groups. If an FFRDC were to be used (IDA was mentioned), all BRAC work would be kept isolated from other elements of their organization. The members agreed that rules for the use of contractors must be established.

The next item of discussion from the BRAC 95 Review Group meeting was the issue of outsourcing. The Group was told that outsourcing is an integral part of the BRAC process and includes the utilization of other Federal agencies as alternative sources of products and services. How data from other agencies and the private sector is certified is yet to be resolved however. It was suggested that IDA find out what facilities and services are available from other agencies and the private sector (much of this information should be available in the TECNET data base).

The next item was that of milestones. A draft of functions and bases was distributed for consideration by the members. Recommendations for measures of merit, guidelines and assumptions are to be provided by the Services by Friday, February 4. It was suggested that the Services present short briefings (15 minutes) to the Group on their respective base closure processes. The Group agreed and the briefings were scheduled for two weeks from today (February 15).

The Internal Control Plan was discussed next (a draft plan was provided to the members). However, it was decided to hold off on any agreement since the BRAC 95 Steering Group will soon establish a working group to develop a standard Internal Control Plan for use by the Cross-Service groups.

The Group then turned to a discussion of defining the "universe" of test and evaluation sites and facilities for

consideration under the BRAC 95 process. After some discussion of various discriminators it was agreed that only those sites/facilities that had investment costs of more than $10 million or 100 or more employees (military and civilian) would be included in the process. Non-DoD sites and facilities would not be included in the initial screening process.

The Chairman asked that the members review the draft of functions and bases prepared by the Air Force and provide similar inputs by noon Friday, February 4.

The members were reminded that recommendations for the measures of merit, guidelines and assumptions were also due by February 4.

The meeting adjourned at 1000 hrs.

Approved:

Lee Frame
Co-Chairman

John Bolino
Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

February 1, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Acting Co-Chair
Mr. Irv Boyles, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Mr. George London, Air Force
Mr. John Meeuwissen, Air Force
Mr. Walt Hollis, Army
Mr. John Gehrig, Army
MAJ Jack Marriott, Army TABS
Mr. Gerry Schiefer, Navy
CAPT Dave Rose, Navy
COL Tom Baker, OSD DISA
Mr. Glen Bradley, DISA
Dr. Don Linger, OSD Defense Nuclear Agency
Mr. Dom Miglionico, ODASD(ER&BRAC) BCU
Ms. Kathleen Ruemmele, BMDO
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Frank Lewis, OSD PA&E

LIST OF SERVICE RDT&E ACTIVITIES

Provisional List of Army RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Aeromedical Research Laboratory
Fort Rucker, AL 36362-5292
Subordinate Activities:
Aeromedical R&D Center - Blast Operations Site
Kirtland AFB, NM

Armament Research, Development and Engineering Center
Picatinny Arsenal, NJ 07806-5000
Subordinate Activities:
ARDEC Coordination test office at Combat Systems Test Activity
Aberdeen PG, MD
ARDEC Coordination test office at Yuma Proving Ground
Yuma PG, AZ 85365
ARDEC Coordination test office at White Sands
White Sands Missile, NM 88002
ARDEC Coordination test office at Dugway Proving Ground
Dugway PG, UT 84022
ARDEC element, Rock Island Arsenal
Rock Island, IL 61299-6000
ARDEC element, Watervliet Arsenal
Watervliet, NY 12189-5000

Army Jefferson Proving Ground
Madison, IN

Army Research Laboratory
Adelphi, MD 20783-1197
Established in FY-92
Subordinate Activities:
Ballistic Research Directorate, ARL
Aberdeen Proving Grd, MD 21005-5066
Formerly Ballistic Research Laboratory
Harry Diamond Directorate, ARL
Adelphi, MD 20783-1197
Formerly Harry Diamond Laboratories
Human Engineering Directorate, ARL
Aberdeen Proving Grd, MD 21005-5001
Formerly Human Engineering Laboratory
Material Technology Directorate, ARL
Watertown, MA 02172-0001
Formerly Materials Technology Laboratory
Atmospheric Sciences Directorate, ARL
White Sands Msl Rng, NM 88002-5501
Formerly Atmospheric Sciences Laboratory
Electronics Technology & Devices Directorate, ARL
Fort Monmouth, NJ 07703-5000
Formerly Electronics Technology & Devices Laboratory
Vulnerability Assessment Directorate, ARL
White Sands Msl Rng, NM 88002-5513
Formerly Vulnerability Assessment Laboratory

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

ARL adjunct location
White Sands Missile, NM 88002
ARL adjunct location at NASA Langley Research Center
Hampton, VA
ARL adjunct location at NASA Lewis Research Center
Cleveland, OH
Harry Diamond Laboratory Research Facility, ARL
Woodbridge, VA
To be closed in 1994
Blossom Point Test Area, ARL
Blossom Point, MD

Army Research Office
Research Triangle Pk, NC 27709-2211

Aviation Research, Development and Engineering Center
St. Louis, MO 63120-1798
Subordinate Activities:
Aviation RDEC, Aviation Applied Tech Dir
Ft Eustis, VA 23604-5577
AVRDEC adjunct location-NASA Langley
Hampton, VA
AVREC adjunct location-NASA Lewis
Cleveland, OH
AVRDEC adjunct location-NASA Ames
Moffett Field, CA

Aviation Technical Test Center
Fort Rucker, AL 36362-5276
Subordinate Activities:
Airworthiness Qualification Test Directorate
Edwards AFB, CA 93523

Belvoir Research, Development and Engineering Center
Fort Belvoir, VA 22060-5606

CECOM Research, Development and Engineering Center
Ft. Monmouth, NJ 07703-5000
Formerly Center for C3 Sys
Subordinate Activities:
Center for Electronic Warfare/RSTA
Fort Monmouth, NJ 07703-5206
Was consolidated into Communications-Electronics RDEC
Center for Night Vision & Electro-optics
Ft. Belvoir, VA 22060-5677
Was consolidated into Communications-Electronics RDEC
CECOM Center for Signals Warfare
Warrenton, VA 22186-5100
Was consolidated into Communications-Electronics RDEC

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Chemical Research Development and Engineering Center
Aberdeen PG, MD 21010-5423

Cold Regions Research and Engineering Laboratory
Hanover, NH 03755-1290
Subordinate Activities:
CRREL-Alaska Office
Fairbanks, AK

Cold Regions Test Center
Fort Greely, AK 96508-7850

Combat Systems Test Activity
Aberdeen PG, MD 21005-5059

Construction Engineering Research Laboratories
Champaign, IL 61826-9005
Subordinate Activities:
Construction Engineering Research Lab, USA Engineering Division N.Central
Chicago, IL

Dugway Proving Ground
Dugway, UT 84022-5000
Subordinate Activities:
Dugway Proving Ground - Tropic Test Site
Panama

Electronic Proving Ground
Fort Huachuca, AZ 85613-7110

Engineer Waterways Experiment Station
Vicksburg, MS 39180-6199
Subordinate Activities:
EWES - Coastal Field Research Facility
Duck, NC

Institute of Surgical Research
Fort Sam Houston, TX 78234-5012

Materiel Systems Analysis Activity
Aberdeen PG, MD 21005-5071

Medical Research & Development Command
Frederick, MD 21702-5012

Medical Research Institute of Chemical Defense
Aberdeen PG, MD 21010-5425

Medical Research Institute of Infectious Diseases
Fort Detrick, MD 21702-5011

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Missile Research, Development & Engineering Center
Redstone Arsenal, AL 35898-5241

Natick Research, Development & Engineering Center
Natick, MA 01760-5000

OPTEC Test and Evaluation Command
Fort Hood, TX 76544-5065

Research Institute for the Behavioral & Social Sciences
Alexandria, VA 22333-5600
Subordinate Activities:
Res Inst for Behavioral & Social Sciences Field Unit
Presidio of Montery, CA
Res Inst for Behavioral & Social Sciences Field Unit
Fort Benning, GA
Res Inst for Behavioral & Social Sciences Field Unit
Fort Bliss, TX
Res Inst for Behavioral & Social Sciences Field Unit
Fort Knox, KY
Res Inst for Behavioral & Social Sciences Field Unit
Boise/Gowan, ID
Res Inst for Behavioral & Social Sciences Field Unit
Fort Rucker, AL
Res Inst for Behavioral & Social Sciences Field Unit
Orlando, FL
Res Inst for Behavioral & Social Sciences Field Unit
Fort Gordon, GA
Res Inst for Behavioral & Social Sciences - USA Europe
Europe
Res Inst for Behavioral & Social Sciences,
National Training Center Data & Analysis Center
Ft. Irwin, CA

Research Institute of Environmental Medicine
Natick, MA 01760-5007
Subordinate Activities:
Research Institute of Environmental Medicine - Field Facility
Pikes Peak, CO

Tank-Automotive Research, Development & Engr Center
Warren, MI 48397-5000

Topographic Engineering Center
Fort Belvoir, VA 22060-5546

Walter Reed Army Institute of Research
Washington, DC 20307-5100
Subordinate Activities:
Water Reed Army Institute of Research, USA Medical Component AFRIM
Thailand

Italic text indicates addition since 12/14/93 Edition

Provisional List of Army RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Water Reed Army Institute of Research, USA Medical Research Unit Brazil
Water Reed Army Institute of Research, USA Medical Research Unit Fort Bragg, NC
Water Reed Army Institute of Research, USA Medical Research Unit Korea
Water Reed Army Institute of Research, USA Medical Research Unit Europe
Water Reed Army Institute of Research, USA Medical Research Unit Kenya

White Sands Missile Range
White Sands, NM 88002-5014

Yuma Proving Ground
Yuma, AZ 85365-9102

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Aerospace Medical Research Laboratory
Pensacola, FL 32508-1046
Subordinate Activities:
Aerospace Medical Research Lab, Radio Communications Monitor
Pensacola, FL 32508-1046

Air Warfare Center
Arlington, VA 22243-600
Subordinate Activities:
NAWC Aircraft Division, Patuxent
Patuxent River, MD 20670-5304
formerly Air Test Center
NAWC Weapons Division
China Lake, CA 93555-6000
formerly Naval Weapons Center
Ordnance Missile Test Station
White Sands, NM 88002-5510
NAWC Aircraft Division, Warminster
Warminster, PA 18974-0591
formerly Air Development Center
NAWC Aircraft Division, Trenton
Trenton, NJ 08628-0176
formerly Air Propulsion Center
Weapons Evaluation Facility, Kirtland AFB
Albuquerque, NM 87117-5000
Pacific Missile Test Center
Point Mugu, CA 93042-5001
NAWC Aircraft Division, Lakehurst
Lakehurst, NJ
Naval Air Station
Point Mugu, CA
Air Weapons Station
China Lake, CA
NAWC Aircraft Division, Indianapolis
Indianapolis, IN

Biodynamics Laboratory
New Orleans, LA 70129-0407

Civil Engineering Laboratory
Port Hueneme, CA 93043-4328

Clothing and Textile Research Facility
Natick, MA 01760-0001

Command, Control and Ocean Surveillance Center
San Diego, CA 92147-5088
Subordinate Activities:
Electronic Systems Engineering Center
North Charleston, SC

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Electronic Systems Engineering Center
Vallejo, CA
Electronic Systems Engineering Center
San Diego, CA
Electronic Systems Engineering Center
Portsmouth, VA
Electronic Systems Command Systems Engineering Activity
St. Inigoes, MD
Electronic Systems Security Engineering Center
Washington, DC
Electronics Engineering Activity, Pacific
Pearl Harbor, HI
Command, Control and Ocean Surveillance, Software Support Group
San Diego, CA
Space Systems Activity
Los Angeles, CA

Dental Research Institute
Great Lakes, IL 60088-5259

Explosive Ordnance Disposal Technology Center
Indian Head, MD 20640-5070
Subordinate Activities:
Explosive Ordnance Disposal Technology Center Remote Sites
Indian Head, MD 20640-5070

Health Research Center
San Diego, CA 92186-5122

Medical Research Institute
Bethesda, MD 20889-5607
Subordinate Activities:
Naval Medical Research Institute Annex
Rockville, MD

Medical Research Unit #2
Jakarta, Indonesia, 96520-8132

Medical Research Unit #3
Cairo, Egypt,

Naval Research Laboratory
Washington, DC 20375-5000
Subordinate Activities:
NRL Detachment
Stennis Space Center, MS 39529-5004
formerly Oceanographic & Atmospheric Research Laboratory
NRL, Information Technology Div antenna range
Brandywine, MD
NRL, Information Technology Div test range
Pomonkey, MD

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

NRL, Condensed Matter & Radiation Sciences Div (detachment)
Brookhaven, NY
NRL, Research Computation Division
Sites Worldwide,
NRL, Space Sciences Division
Waldorf Annex, MD
NRL, Space Sciences Division facility
San Nicolas Island, CA
NRL, Space Sciences Division facility
Maryland Point, MD
NRL, Space Sciences Division E.O. Hulburt Center for Space Rsrch
NRL, Underwater Sound Reference Detachment
Orlando, FL
NRL Chesapeake Bay Detachment
Chesapeake Beach, MD
NRL Patuxent River Naval Air Station
Patuxent River, MD
NRL Tilghman Island field station
Tilghman Island, MD
NRL Midway Research Center
Quantico, VA
NRL Underwater Sound Reference Detachment - Bugg Spring
Leesburg, FL
NRL Marine Corrosion Facility
Key West, FL
Used by NLR under intra or inter-service agreement
NRL Ex-USS Shadwell (LSD-15) fire research vessel
Mobile Bay, AL
NRL Artificial Intelligence Center
Bolling AFB, Wash., DC
NRL Dock Facility, Fishing Creek
Chesapeake Bay, MD

Office of the Chief of Naval Research
Arlington, VA 22217-5660

Personnel Research and Development Center
San Diego, CA 92152-7250
Subordinate Activities:
Tri-Service Virtual Reality Laboratory, Naval Training Systems Ce
Orlando, FL 32826

Submarine Medical Research Laboratory, NAVSUBASE New London
Groton, CT 06349-5900

Surface Warfare Center
Arlington, VA 22242-5160
Subordinate Activities:
Carderock Division, NSWC
Bethesda, MD 20084-5000
formerly David Taylor Research Center

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Coastal Systems Station Dahlgren Division, NSWC
Panama City, FL 32407-7001
formerly Coastal Systems Center
Surface Weapons Center
Fort Lauderdale, FL
Ships Research & Development Test Facility
Bayview, ID
NSWC Dahlgren Division
Dahlgren, VA
Fleet Combat Direction Systems Act., Dam Neck Port Hueneme Div.
Virginia Beach, VA
Port Hueneme Division NSWC
Port Hueneme, CA
Ship Systems Engineering Station, Carderock Division
Philadelphia, PA
Crane Division NSWC
Crane, IN
Indian Head Division NSWC
Indian Head, MD
Integrated Combat Systems Test Facility Port Hueneme Division
San Diego, CA
Ordnance Station Crane Division
Louisville, KY
NSWC, Dahlgren Coastal Systems Station
Dahlgren, VA 22448
NSWC, Dahlgren Div White Oak Facility
Silver Spring, MD 20903-5000
NSWC, Carderock Division - Patuxent River
Patuxent River, MD
NSWC, Carderock Division - Memphis
Memphis, TN
NSWC, Carderock Annapolis Site
Annapolis, MD
NSWC, Carderock Division - Portsmouth site
Portsmouth, VA
NSWC, Carderock Division - Santa Cruz site
Santa Cruz, CA
NSWC, Carderock Division - Bremerton site
Bremerton, WA
Carr Inlet test facility.
NSWC, Carderock Division - Ketchikan site
Ketchikan, AK
NSWC, Carderock Division - Panama City
Panama City, FL
NSWC, Carderock Division - Cape Canaveral
Cape Canaveral, FL
NSWC, Carderock Division - Norfolk
Norfolk, VA

Undersea Warfare Center
Newport, RI 02841-1708

Italic text indicates addition since 12/14/93 Edition

Provisional List of Navy RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Subordinate Activities:

NUWC Division, Newport
Newport, RI 02841-5047
formerly Underwater Systems Center
Atlantic Undersea Test & Evaluation Center
West Palm Beach, FL
Undersea Research & Development Calibration Station
Bayview, ID
NUWC Division, Keyport
Keyport, WA
NUWC Detachment
New London, CT
NUWC Detachment
Dodge Pond, CT
NUWC Detachment Andros Islands, Bahamas
Andros Is., Bahamas,
NUWC Detachment
Seneca Lake, NY
NUWC test site
Fisher's Island, NY
NUWC Detachment Hawaii
Pearl Harbor, HI
NUWC Detachment
San Diego, CA
NUWC Detachment
Bangor, WA
NUWC Northwest Range Nanoose Site
AK
NUWC Northwest Range Dabob Site
AK
NUWC Northwest Ranges Quinalt Site
AK
NUWC Langley Seawater Tow Tank
Langley Field, VA
NUWC San Clemente Island Underwater Range
San Clemente Island, CA

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

30th Space Wing
Vandenberg AFB, CA 93437

45th Space Wing
Patrick AFB, FL 32925

4950th Test Wing
Wright-Patterson AFB, OH 45433-5000
Subordinate Activities:
4950th Test Wing's 2000 sq mile restricted test area in SW Ohio
Southwestern, OH

6585th Test Group
Holloman AFB, NM 88330-5000

Air Force Office of Scientific Research
Bolling AFB, DC 20332-6448

Armstrong Laboratory
Brooks AFB, TX 78235-5000
Subordinate Activities:
Aerospace Medicine Lab - Directorate, Armstrong Lab
San Antonio, TX 78235-5000
Human Resources Directorate, Armstrong Lab
Brooks AFB, TX 78235-5601
Occupational and Environmental Health Directorate, Armstrong Lab
San Antonio, TX 78235-3500
Armstrong detachment, Lackland AFB
Lackland AFB, TX

Arnold Engineering Development Center (AFMC)
Arnold AFB, TN 37389-1314

Development Test Center
Eglin AFB, FL 32542-6861
Subordinate Activities:
Development Test Center Gulf water test areas
Eglin AFB, FL
Estimated location

Flight Test Center
Edwards AFB, CA 93524-5000
Subordinate Activities:
Flight Test Center, Utah test and training range
UT

Frank J. Seiler Research Laboratory
USAF Academy, CO 80840-6272
Under AFOSR & Super Labs

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94

Containing all major facilities and some minor facilities.
List will be expanded.

Phillips Laboratory
Kirtland AFB, NM 87117-6008
Subordinate Activities:
Geophysics Laboratory - Directorate
Bedford, MA 01731
Phillips Laboratory, Air Force Maui optical station
Maui, HI
Phillips Lab Propulsion Directorate
Edwards AFB, CA

Rome Laboratory
Griffiss AFB, NY 13441-4514
Subordinate Activities:
Command, Control, and Communications Directorate, Rome Lab
Griffiss AFB, NY 13441-4505
Intelligence and Reconnaissance Directorate, Rome Lab
Griffiss AFB, NY 13441-4114
Surveillance & Photonics Directorate, Rome Lab
Griffiss AFB, NY 13441-4514
Electromagnetics & Reliability Directorate, Rome Lab
Hanscom AFB, MA 01731
Ava Research Facility, Rome Lab
Ava, NY
Forestport Research Facility, Rome Lab
Forestport, NY
Ipswich Research Facility, Rome Lab
Ipswich, MA
Newport Research Facility
Newport, NY
Prospect Hill Research Facility, Rome Lab
Waltham, MA
Stockbridge Research Facility, Rome Lab
Stockbridge, NY
Verona Research Facility, Rome Lab
Verona, NY

Wright Laboratory
Wright-Patterson AFB, OH 45433-6523
Subordinate Activities:
Materials Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Avionics Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Aero Propulsion and Power Lab-Directorate, Wright Lab
WPAFB, OH 45433
Electronic Technology Laboratory/Solid State Electronics Director
WPAFB, OH 45433
Flight Dynamics Laboratory-Directorate, Wright Lab
WPAFB, OH 45433
Armament Laboratory-Directorate, Wright Lab
Eglin AFB, FL 32542

Italic text indicates addition since 12/14/93 Edition

Provisional List of Air Force RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Crew Systems Directorate, Wright Lab
Dayton, OH 45433

Italic text indicates addition since 12/14/93 Edition

Provisional List of DNA RDT&E Activities as of 01/10/94
Containing all major facilities and some minor facilities.
List will be expanded.

Armed Forces Radiobiology Research Institute
Bethesda, MD 20889-5603

Italic text indicates addition since 12/14/93 Edition

What follows is a listing of 422 unique sites represented in the TECNET Unified Data Base. This
lata base includes 10,016 records associated with:

1) The DoD T&E Assets Data Base
2) The Army's Test Facility Register
3) The Air Force's Automated Test Resource Information System

The unique sites/organizations are:

1 30th SPACE WING
2 4440 TFTG (RED FLAG
3 45th SPACE WING
4 475th WEAPONS EVALUATION GROUP
5 6585th TEST GROUP
6 AATF
7 ABERDEEN PG MD
8 ACURX
9 ADVANCED SENSORS DIRECTORATE
10 AEC
11 AEL
12 AEROFLIGHTDYNAMICS DIRECTORATE
13 AEROMET HIGH ALTITUDE OBSERVATORY
14 AERONAUTICAL SYSTEMS DIV, 4950 TEST WING
15 AEROSPATIALE-AQUITAINE
16 AF Satellite Control Facility, 6594th TG
17 AGTO
18 AIL
19 AIR DEFENSE AND SPACE SYSTEMS DIV
ir Defense Board
AIR FORCE ASTRONAUTICS LABORATORY
22 AIR FORCE DEVELOPMENT TEST CENTER
23 AIR FORCE ELECTRONIC WARFARE EVALUATION SIMULATOR
24 AIR FORCE FLIGHT TEST CENTER
25 Air Force Logistics Command
26 AIR FORCE MATERIAL COMMAND
27 Air Force Weapons Laboratory
28 Air Force Wright Aeronautical Lab
29 AIRBORNE & SPECIAL OPERATIONS TEST DIREC
30 AIRCRAFT RESEARCH ASSOCIATION
31 ALCOA
32 AMCCOM
33 AMERICAN NUCLEAR
34 Ames Research Center
35 ANNISTON ARMY DEPOT
36 ANTIGUA WEST INDIES
37 APPLIED PHYSICS LABORATORY
38 ARDEC
39 Armament Division, 3246th Test Wing
40 Armament Division, 6585th Test Group
41 ARMAMENT ENGINEERING DIRECTORATE
42 ARMAMENT RESEARCH, DEV & ENGR CENTER
43 Armed Forces Radiological Research Inst
44 Armor and Engineer Board
RNOLD ENGINEERING DEVELOPMENT CENTER
SIF
Atlantic Fleet Weapons Training Facility

48 Atlantic Undersea Test & Evaluation Cntr
49 ATMOSPHERIC SCIENCES DIVISION
Atmospheric Sciences Laboratory
ATS
52 AUSTRALIAN NATIONAL UNIVERSITY
53 AVIATION APPLIED TECHNOLOGY DIRECTORATE
54 Aviation Development Test Activity
55 Aviation Engineering Flight Activity
56 AVIATION TECHNICAL TEST CENTER
57 AVIONICS RESEARCH & DEVELOPMENT ACTIVITY
58 Ballistic Research Laboratory
59 BARBERS PT NAS HI
60 BATELLE
61 BDM Corp - Albuquerque
62 BEECH
63 BELL
64 BELVOIR RD&E CENTER
65 BENDIX
66 BERMUDA FLIGHT CENTER
67 BF Goodrich
68 BMFT
69 BOEING
70 BRAZILIAN INSTITUTE FOR SPACE RESEARCH
71 BRITISH AEROSPACE
72 BROOKS AFB
73 BSH
74 C3I VULNERABILITY DIV
75 CALSPAN
CAMP PARKS CA
CAPE CANAVERL AFS FL
78 CARTER CAY VI, MARSH HARBOUR BI, ELEUTHERA BI,
79 CENTRE D'ESSAIS DES PROPULSEURS DESACLAY
80 CENTRE D'ETUDES AERODYNAMIQUES ET THERMI
81 CENTRO ITALIANO RICERCHE AEROSPAZIALI
82 CHEMICAL RD & E CENTER
83 Chemical Systems Laboratory
84 CHEYENNE MTN AFB CO
85 Chrysler Corp Space Division
86 Civil Engineering Research Facility
87 CLOSE COMBAT AMMUNITION CENTER
88 CLOSE COMBAT ARMAMENT CENTER
89 CML RD&E CENTER
90 COLD REGIONS RESEARCH AND ENGINEERING LABORATORY
91 COLD REGIONS TEST CENTER
92 COLLINS
93 COMBAT SYSTEMS TEST ACTIVITY
94 COMMUNICATION-ELECTRONICS COMMA
95 COMMUNICATIONS CANADA
96 COMMUNICATIONS RESEARCH CENTER
97 COMMUNICATIONS-ELECTRONICS COMMAND
98 CONDRON ARMY AIRFIELD (AAF)
99 CORPUS CHRISTI ARMY DEPOT
100 CSIST
SOC
STC
3 DEFENSE AMMUNITION CENTER & SCHOOL

104 DEFENSE COMMUNICATIONS AGENCY
105 Defense Nuclear Agency
Defense Nuclear Agency Field Agency
DELFT UNIVERSITY OF TECHNOLOGY
108 DEPARTMENT OF ENERGY
109 DEUTSCHE FORSCHUNGSANSTALT FUER LUFT
110 DFVLR, NLR, ONERA, RAE
111 DIEGO GARCIA
112 DIRECTORATE OF PRODUCT ASSURANCE
113 DMSP
114 DOD JOINT SPACE TEST RANGE
115 DOD JOINT SPACE TEST RANGE
116 DTB
117 DUGWAY PROVING GROUND
118 EASTERN SPACE AND MISSILE CENTER (
119 EDWARDS AFB (MAIN BASE)
120 EDWARDS AFB (NORTH BASE)
121 EDWARDS AFB (SOUTH BASE)
122 EGLIN AFB FL
123 Electronic Combat Test and Integ. Div.
124 ELECTRONIC PROVING GROUND
125 Electronic Warfare Laboratory
126 Electronics Technology & Devices Lab
127 ELECTRONICS TECHNOLOGY AND DEVICES LAB
128 Engineer Waterways Experiment Station
129 ENV & STRUCTURAL TEST LAB
130 ERADCOM Flight Test Activity
131 ESL
EUROPEAN SPACE AGENCYE
EUROPEAN TRANSONIC WINDTUNNEL
134 EW/RECONNAISSANCE SURVEILLANCE & TARGET ACQUISITION
135 EW/RECONNAISSANCE SURVEILLANCE & TARGET ACQUISITION CNTR
136 EWAC
137 FAIRCHILD SATELLITE OPERATIONS CENTER
138 FAIRCHILD SPACE CHAMBER
139 FALCON AFB CO
140 FALLON TRAINING RANGE COMPLEX
141 FBI
142 FDA
143 FIRE SUPPORT ARMAMENT CENTER
144 FLAM & RUSSELL
145 FLUIDYNE
146 FOKKER SPACE & SYSTEMS
147 FORD
148 FT BLISS TX
149 FT HUACHUCHA AZ
150 FT IRWIN CA
151 FTRC
152 FTRC
153 FUJI HEAVY INDUSTRIES
154 GASL
155 General Applied Science Laboratories Inc
156 GENERAL DYNAMICS
GENERAL ELECTRIC
General Motors
159 GENERAL MOTORS

160 GEORGE AFB CA
161 George C. Marshall Space Flight Center
Georgia Institute of Technology
GEORGIA TECHNOLOGICAL RESEARCH INSTITUTE
164 GI
165 Goddard Space Flight Center
166 GRAND BANKS IS
167 GRAND TRUNK IS
168 GRUMMAN
169 GUAM
170 GUIDANCE CONTROL DIRECTORATE
171 HALEAKALA MAUI HI
172 HARRIS
173 HARRY DIAMOND LABORATORIES
174 Hawthorne Army Ammunition Plant
175 HDL
176 HDL
177 HERMANN-FOETTINGER INSTITUT
178 HIGH ENERGY LASER SYSTEM TEST FACILITY DIRECTORATE
179 HILL AFB UT
180 HOLLOMAN AFB NM
181 HONEYWELL
182 HP
183 HUGHES
184 HURLBURT FIELD FL
185 IABG
186 IAL SPACE
187 IBM
FI
ITRI EXPLOSION SCIENCE FACILITY
190 INDIAN SPGS AFAF NV
191 Infantry Board
192 INSTITUED OF SPACE AND ASTRONAUICAL SCIE
193 INSTITUT AEROTECHNIQUE DE ST. CYR
194 INSTITUT DE MACANIQUE DES FLUIDES
195 INSTITUT DE SAINT-LOUIS
196 INSTITUTE OF SPACE AND ASTRONAUTICAL SCI
197 INTELLIGENCE ELECTRONIC WARFARE TEST DIR
198 International Neutronics
199 INTERSPACE
200 IRT Corporation
201 ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO.
202 ITEK
203 ITT
204 JDMTA FL
205 JEFFERSON PROVING GROUND
206 Jet Propulsion Laboratory
207 JOHNS HOPKINS PROPULSION RESEARCH LABORATORY
208 JOHNS HOPKINS SPACE SIMULATION LABORATORY
209 Johnson Space Center
210 KAENA POINT AFS HI
211 KAWASAKI HEAVY INDUSTRIES
212 Kennedy Space Center
KIRTLAND AFB NM
Kokee, HI - NASA
215 KWAJALEIN MISSILE RANGE

216 LABCOM
217 LABCOM PLATE ACCELERATOR FACILITY
ABORATOIRE D'AEROTHERMIQUE DE CENTRE
ABORATOIRE DE RECHERCHES BALISTQUES
220 LABORATORY CONTROL BRANCH
221 LAGUNA PEAK CA
222 Langley Research Center
223 Lawrence Livermore National Lab
224 LETTERKENNY ARMY DEPOT
225 Lewis Research Center
226 LIT/INPE BRAZILLIAN INSTITUTE FOR SPACE
227 LITTON AMECOM
228 LOCKHEED
229 LORAL
230 Los Alamos National Laboratory
231 LTV
232 Magnavox
233 MAINTENANCE DIRECTORATE
234 MALABAR
235 MARCONI SPACE SYSTEMS LTD.
236 Marquardt
237 MARSHALL IS
238 MARSHALL SPACE FLIGHT CENTER
239 MARTIN MARIETTA
240 Materials Technology Laboratory
241 MATERIALS TECHNOLOGY LABORATORY
242 MATERIALS TESTING AND EVALUATION BRANCH
243 MAUI HI
laxim Technologies
Maxwell Laboratories
246 MCCARRAN INTL APT NV
247 MCDONNELL DOUGLAS
248 MERDC
249 MIDWAY ISLAND
250 Missile Command
251 MIT
252 MITSUBISHI HEAVU INDUSTRIES,LTD.
253 Mobility Equipment R&D Command
254 MOFFETT FLD NAS CA
255 Morton Thiokol,
256 MOTOROLA
257 NADEP
258 NAGOYA AEROSPACE SYSTEMSWORKS
259 NAS PATUXENT RIVER, MD
260 NASA MATERIALS AND COMPONENTS TEST FACILITIES
261 NASA PILLAR POINT AFS (PPAFS) TELEMETRY SITE
262 NASA Slidell Computer Complex
263 NASDA
264 NAT'L LUCHT-EN RUIMTEVAARTLABORATORIUM
265 Natic Research & Development Labs
266 NATICK RESEARCH, DEVELOPMENT ENGINEERING
267 NATIONAL AEROSPACE LABORATORY
268 National Institute of Standards & Tech.
ational Parachute Test Range
ATIONAL RESEARCH COUNCIL CANADA
1 National Space Technology Laboratories

272 National Technical Systems
273 NATIONAL TEST BED
'ATO INTEGRATED COMMUNICATIONS SYSTEM
.NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION
276 NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION, INDIANAPOLIS
277 NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION, LAKEHURST
278 NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION, TRAINING SYSTEMS DI
279 NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION, TRENTON
280 NAVAL AIR WARFARE CENTER - AIRCRAFT DIVISION, WARMINSTER
281 NAVAL AIR WARFARE CENTER - WEAPONS DIVISION
282 NAVAL AIR WARFARE CENTER - WEAPONS DIVISION - CHINA LAKE
283 NAVAL AIR WARFARE CENTER - WEAPONS DIVISION - PT. MUGU
284 NAVAL CIVIL ENGINEERING LABORATORY
285 Naval Research Laboratory
286 Naval Surface Weapons Center - Dahlgren
287 Naval Undersea Warfare Engineering Sta
288 Naval Underwater Systems Center - New London Lab
289 Naval Underwater Systems Center - Newport
290 Naval Weapons Evaluation Facility
291 NAVAMDEP
292 NAWS CHINA LAKE
293 NAWS PT, MUGU
294 NELLIS AFB NV
295 NEW MEXICO STATE UNIVERSITY
296 Night Vision and Electro-Optic Laboratory
297 NIIHAU ISLAND HI
298 NORTHROP
299 NOS
OSC
.NSMRL
302 NSRDC
303 NTC
304 OAKHANGER ENGLAND
305 OAKHANGER ENGLAND, SEYCHELLES, THULE GREENLAND
306 OFFICE NATIONAL D'EDUTES ET DE RECHERCHE
307 OFFUTT AFB NE
308 ONIZUKA AFB CA
309 OPTEC THREAT SUPPORT ACTIVITY
310 OTSA
311 PACIFIC MISSILE RANGE FACILITY
312 PATRICK AFB FL
313 PERKIN ELMER
314 PETERSON AFB CO
315 PHILCO
316 PHILCO FORD
317 Physics International
318 PILLAR POINT AFS CA
319 PRATT & WHITNEY
320 PRODUCT ASSURANCE AND TEST DIRECTORATE
321 Product Assurance Dir - Aberdeen Prov Gd
322 PRODUCT ASSURANCE DIRECTORATE-PICATINNY
323 PRODUCTION ENGINEERING DIVISION
324 PROJECT DESIGN & DEVELOPMENT BRANCH
ROPULSION DIRECTORATE, AVSCOM
.ADEF
7 RANTEC

328 RAYTHEON
RCA
ED RIVER ARMY DEPOT
EDSTONE TECHNICAL TEST CENTER
332 Research & Tech Labs - Applied Tech Lab
333 Retlif
334 RFSS
335 RHEINISCH-WESTFALISCHEN TECHNISCHEN HOCH
336 RL/ERPT GAFB
337 ROCK ISLAND ARSENAL
338 ROCKET RESEARCH
339 ROCKWELL
340 ROME AIR DEVELOPMENT CENTER
341 ROYAL AEROSPACE ESTABLISHMENT
342 SACRAMENTO ARMY DEPOT
343 SAIPAN CNMI CENT PAC
344 SAN NICOLAS IS CA
345 Sandia National Laboratory - Albuquerque
346 SANTA BARBARA RESEARCH CENTER FPA CHAMBER
347 SANTA CRUZ IS CA
348 SANTA YNEZ PEAK CA
349 School of Aerospace Medicine
350 Science Applications International Corp
351 SDC
352 SEAVEY
353 SEDCO
354 SEMIVAF/VAL
SEYCHELLES
HARPE ARMY DEPOT
HEMYA AFB AK
Southwest Research Institute
359 SPACE AND STRATEGIC DEFENSE COMMAND
360 SPACE TEST RANGE
361 SPACECOM
362 Sperry Systems Test Center
363 SRI International
364 STANFORD
365 STENNIS SP CEN MS
366 STR TEST SUPPORT COMPLEX
367 Structural Dynamics Branch
368 SYSTEM SIMULATION AND DEVELOPMENT DIR
369 Tactical Fighter Weapons Center
370 TANDEM
371 TANK-AUTOMOTIVE COMMAND
372 TECHNICAL RESEARCH AND DEVELOPMENT INST.
373 TECHNISCHE UNIVERSITAL BRAUNSCHWEIG
374 TEKTRONIX
375 Teledyne Brown Engineering
376 TEXAS A&M
377 TEXCOM
378 THULE GREENLAND
379 TI
380 TOBYHANNA ARMY DEPOT
ONOPAH TEST RNG
OOELE ARMY DEPOT
TOSHIBA CORP

384 TRANSCO
Tropic Test Center
ROPIC TEST CENTER
RW
388 TYNDALL AFB FL
389 UNITED TECHNOLOGIES
390 UNIV OF OKLAHOMA
391 UNIVERSITAL STUTTGART
392 UNIVERSITY OF MARYLAND
393 UNIVERSITY OF QUEENSLAND
394 University of Texas
395 UNIVERSITY OF TORONTO AEROSPACE INST
396 UNIVERSITY OF TSUKUBA
397 USNS OBSERVATION ISLAND
398 USNS REDSTONE
399 USNS VANDENBERG
400 USNS WHEELING
401 UTAH TEST AND TRAINING RANGE
402 VANDENBERG AFB CA
403 VIRGINIA TECHNICAL INSTITUTE
404 VOICE COMMUNICATIONS EQUIPMENT BRANCH
405 VON KARMAN INSTITUTE FOR FLUID DYNAMICS
406 VOUGHT
407 VULNERABILITY ASSESSMENT LABORATORY (VAL)
408 WAKE ISLAND
409 Wallops Flight Center
410 WALLOPS ISLAND FLIGHT FACILITY
WATERWAYS EXPERIMENT STATION
ENDOVER AIR FORCE AUXILIARY FIELD
WESTERN RANGE
414 Western Space and Missile Center
415 WESTINGHOUSE
416 WHEELER AFB HI
417 WHITE SANDS MISSILE RANGE
418 WICHITA STATE
419 WML KHILS
420 WRT-PATTERSON AFB OH
421 WSA/TVA
422 WSTF NM
423 WYLE LABORATORIES
424 YUMA PROVING GROUND

DATA ON
T&E SITES AND FACILITIES

February 1, 1994

Irv Boyles
DT&E/TFR

OVERVIEW

- Summary of Jan 27 Package
- Discussion of Task
- Review of Alternatives

SUMMARY OF JAN 27 DATA PACKAGE

SOURCES

- **Source:** **Sections a through d**

  TECNET Unified Data Bases

  - DoD T&E Assets data base
  - Army's Test Facilities Register
  - Air Force's Automated Test Resource Information System

- **Source:** **Section e**

  Data base prepared for DT&E/TFR from facilities listed in the 1993 Test Capability Master Plans (TCMPs)

SUMMARY OF JAN 27 DATA PACKAGE

CONTENTS

- Section a - 6454 of the TECNET records for T&E facilities
- Section b - 2231 of the TECNET records with many having the site and facility fields reversed
- Section c - Remaining 1899 TECNET records with a number of questionable records
- Section d - List of 488 sites from the TECNET records
- Section e - List of sites and facilities from TCMP data base

(Note - Some packages had sections d and e reversed.)

SAMPLE RECORDS - (With Errors?)

- Section c, Record 433

  PMRF BSH RANGE BOATS ARNOLD AFB TN

- Section c, Record 895

  UTTR 105MM ARTILLERY RANGE VANDENBERG AFB CA

- Section a, Record 4639

  NAVY ANECHOIC CHAMBER

- Section b, Record 438

  AFDTC TEST AREA C-52B PT MUGU NAS CA

- Section c, Record 1670

  WSMR ALTITUDE CHAMBER EGLIN AFB FL

SAMPLE RECORDS - (With Old Data?)

- Section a, Records 3109-3133

  JEFFERSON PROVING GROUND

- Section a, Records 42-67

  4950th TEST WING

- Section a, Records 1211-1212

  Army Infantry Board

SUMMARY OF JAN 27 DATA PACKAGE

SITES INCLUDED

- DoD Test Sites

- Few OT&E or Evaluation Sites

- Other DoD Sites - Depots (e.g., Corpus Christi Army Depot)
  R&D Centers (e.g., Belvoir RD&E Center)
  Laboratories (e.g., Air Force Weapons Lab)

- Contractor Facilities - Boeing, ITT, Marquardt, Grumman

- Other Facilities - NASA, NIST, DOE, Foreign Test Facilities

DISCUSSION OF TASK

- Determine the common support functions and bases to be addressed by the T&E Cross-Service Group (Action 1 from Group Action Plan)

- Questions

  - What statement defines the boundary of the T&E sites and facilities that are to be addressed by the T&E Cross-Service Group?

  - How is the list of all sites and facilities within these bounds gathered and validated?

  - How is the data base describing these sites and facilities and containing the data required for cross-service analyses populated, operated, and maintained?

REVIEW OF ALTERNATIVES

What statement defines the boundary of the T&E sites and facilities that are to be addressed by the T&E Cross-Service Group?

•Scope of DoD Sites
-MRTFB
-RDT&E and O&M Funded Test Sites
-Other DoD sites
Laboratories with test capabilities
Depots with test capabilities
R&D centers
Evaluation sites and facilities
OT&E sites and facilities

•Scope and Role of Non-Dod Sites - Consider as alternatives if DoD capability is reduced or eliminated
-Non-DoD Government sites (e.g., NASA, DOE)

-DoD-funded facilities at Contractor sites
-Contractor T&E facilities

REVIEW OF ALTERNATIVES

What is the purpose of including sites/facilities that DoD can not close?

PROs

- Gathering information on non-DoD sites will allow their consideration as alternative places to do DoD testing if DoD decides to close DoD capability.

- Maintain the integrity of data bases that have a broader scope than the scope of the Cross-Service Group

- Resulting data base will satisfy long-term uses and therefore have increased support from the data providers

CONs

- Extensive data collection effort may overwhelm the available resources

- Collection of data not needed for task may degrade the data needed by diffusing the effort

REVIEW OF ALTERNATIVES

How is the list of all sites and facilities within these bounds gathered and validated?

- Start with list from TECNET data (section d).
  - DoD Components correct, update, and validate

- Start with list from TECNET data (section d).
  - A sub-group gathers and update the listing

- DoD Components submit a list of their sites that meet the group's criteria

REVIEW OF ALTERNATIVES

How is the data base describing these sites and facilities and containing the data required for cross-service analyses populated, operated, and maintained?

- **Start with TECNET data**
  - **Correct, update, and validate**

- **Start with Executive Agent data effort**
  - **Expand to full scope and validate**

- **Initiate a new data collection effort aimed at just the required data**

(Consider these alternatives within the context of the need to "certify" all data used in BRAC analyses and decisions.)

List of All Different Kinds of Testing

	Locations
1) Land Combat	NAWC, 29 Palms, Yuma, TACOM, Kwajalein, APG, Ascension, Picatinny, Antigua, Hunter Liggett, WSMC, Bliss, AUTEC, Hood, AMES, White Sands, Langley, Marshall, Kennedy, Johnson, Green Farm, RWTC, Dahlgren
a) Vehicles	
b) Directed Energy	
c) Surface-Air Weapons	
d) Electric Guns	
2) Space and Ballistic Missiles	Vandenberg, Patrick, Eglin, Edwards, Barking Sands, Hood, NWC, Maui, Pt Mugu, KIrtland, Kwajalein, Nellis, Arnold
a) GPS	
3) Armament and Munitions	Huntsville, DPG, Dahlgren, NWC, YPG, WSMR, Eglin, APG
a) Surface-Surface Missiles	
b) Multi-Spectral Signature Measurement	

	Locations
4) Sea Combat	AUTEC, PMTC, APG, NVWC
5) Air Combat	UTTR, Edwards, YPG, Eglin WSMR, Patuxent River, TACOM, China Lake, Lewis, Pt Mugu, Marshall, Arnold AMES, Ft Rucker, Langley, JPL, Nellis, Wallops, Holloman, APG, W-P AFB, Hill, Huntsville
a) Rotary Wing A/C T&E	
b) Air-Air Missiles	
c) Air-Surface	
d) Airborne Instrumentation	
e) Air Breathing Engines	
f) Fixed Wing A/C	
6) Chem/Bio	Dugway
7) Nuclear Weapons Effects	Crane, Hill, Kirtland, NSC, San Diego, San Leandro, Phoenix, Silver Spring, Adelphi, HDL, APG, Sandia, LLNL, Dahlgren
8) Surface and Air Targets	AFWTF, NAWC, WSMR, Eglin, UTTR, YPG, Kwajalein

9) EW/C3I	<u>Locations</u> ASC, W-P AFB, Kirtland, OPTEC, NRL, NSWC, Carderock, Huachuca, WSMR, Holloman, PMTC, Eglin, Pax River, UTTR
10) Climatic Testing	Eglin, AED, WSMR, NAWC, Lewis
a) Aero-thermo	
b) Rocket Propulsion	
11) Supersonic Sled Tracks	Edwards, Eglin, NAWC, WSMR, PI, Holloman

BRAC TEST CAPABILITY TAXONOMY OPTION

RELIANCE LEADS

Sled Tracks
Climatic Facilities

Munitions
- A-A
- A-S
- S-A

Fixed Wing
Electronic Warfare
Land Vehicles

Targets

GPS
Common Airborne Inst
T&E Support Aircraft
Nuclear Effects
Electric Guns
ABE
Chem/Bio

RELIANCE MODIFIED

Weapon System
- Air Vehicles *
- Land Vehicles
- Naval Systems
- Space Systems
- C4I Systems

Discipline
- Munitions *
- Electronic Combat *
- Nuclear Effects
- Chem/Bio
- Propulsion
- Environmental Effects
- T&E Support Aircraft

NOTE: Reliance Leads (categories) appear too restrictive in some cases, and too limited in others for this exercise. The suggested Reliance Modified categorization by weapon system and discipline groups things in a fashion similar to the Executive Agent paradigm (*) and otherwise focuses on areas where BRAC realignment is theoretically possible.

DRAFT

BRAC TEST CAPABILITY TAXONOMY OPTION
(DATA FOR AIR FORCE TEST CAPABILITY)

RELIANCE MODIFIED AREA	TEST CAPABILITY	LOCATION
WEAPON SYSTEM		
Air Vehicles	Airborne Test Inst Sys	Edwards AFB
	Aircraft Data Anal Fac	Edwards AFB
	Airdrop Load Fac	Edwards AFB
	Alpha Corridor	Edwards AFB
	Antenna Pattern Fac	Edwards AFB
	Avionics Test & Integ Complex	Edwards AFB
	B-2 Test facility	Edwards AFB
	Benefield Anechoic Fac	Edwards AFB
	Dual Air to Grnd Range	Edwards AFB
	Electronic Combat Integ Test	Edwards AFB
	Horizontal Thrust Meas Fac	Edwards AFB
	Integ Fac for Avionics Sys Test	Edwards AFB
	Photo & Infrared Res Range	Edwards AFB
	Precision Impact Range	Edwards AFB
	Radar Fidelity & Geometric Range	Edwards AFB
	Ridley Mission Control Center	Edwards AFB
	Stores & Inertial Sys	Edwards AFB
	Terrain Following Radar Course	Edwards AFB
	Test Suppoer Fac	Edwards AFB
	Test & Eval Mission Sim	Edwards AFB
	Weight & Balance Fac	Edwards AFB
	Utah Test & training Range	Hill AFB
	Engine Test Cell C1/C2	AEDC
	Engine Test Cell J1, J2, J3, J4, J5	AEDC
	Engine Test Cell T1, T2, T4, T5, T7	AEDC
	Propulsion Wind Tunnel 16S, 16T, 4T	AEDC
	Propulsion Wind Tunnel A, B, C	AEDC
	Central Inertial Guidance Test Fac	Holloman AFB
	Sled Track	Holloman AFB
Land Vehicles		
Naval Vehicles		

Space Systems	Eastern Space Range	Patrick AFB
	Weastern Space Range	Vandenberg AFB
	Space Chambers 12V, Mark 1	AEDC
	Range G, S-3	AEDC
	Rocket Test Cells J4, J5, J6	AEDC
	ARIA Aircraft	Edwards AFB
C4I Systems		

DISCIPLINE

Munitions	Advanced Warhead Exp Fac	Eglin AFB
	Aeroballistic Research Fac	Eglin AFB
	Armament Sys Test Env	Eglin AFB
	Chicken Little Seeker/Sensor Test	Eglin AFB
	Electro-Mag Launcher Fac	Eglin AFB
	Guided Weapon Eval Fac	Eglin AFB
	Gulf Range Drone Control Sys	Eglin AFB
	Hellfire Test Fac	Eglin AFB
	Preflt Integ Munitions & Elec Sys Fac	Eglin AFB
	High Explosive Res & Dev Fac	Eglin AFB
	Warning Areas W-151, W-170	Eglin AFB
	Sled Track	Holloman AFB
Electronic Combat	AF Elec Warfare Eval Sys	GD Ft Worth
	Elec Mag Test Env	Eglin AFB
	Real Time Elec Dig Cont Anal & Proc	Buffalo NY
Nuclear Effects		
Chem/Bio		
Propulsion	Sled Tack	Eglin AFB
	High Speed Sled Track	Holloman AFB
	Engine Test Cell C1/C2	AEDC
	Engine Test Cell J1, J2, J3, J4, J5	AEDC
	Engine Test Cell T1, T2, T4, T5, T7	AEDC
	Propulsion Wind Tunnel 16S, 16T, 4T	AEDC
	Propulsion Wind Tunnel A, B, C	AEDC
Environmental Effects	McKinley Climatic Lab	Eglin AFB
T&E Support Aircraft	Test Support Aircraft	Edwards AFB
	Test Support Aircraft	Eglin AFB
	CMMCA	Edwards AFB

STATEMENT OF OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

The T&E Joint Cross-Service Group has been directed by the DEPSECDEF to "identify necessary outsourcing policies and make recommendations regarding those policies." This paper contains the material to meet this requirement.

Terminology:

Government Owned, Contractor Operated (GOCO). The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

Contracted Out. Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

Policy:

The policy concerning "outsourcing" for T&E facilities and bases is:

a. In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility or the base.

b. Outsourcing alternatives will include:

(1) Contracting-out the operation of the existing T&E facility,
(2) Converting the base to a GOCO, or
(3) Transferring the workload to another existing federal government or commercial test facility.

c. The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility.

There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

Outsourcing Goal:

In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector. Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Discussion:

While outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions, there is a limited application of this alternative to the T&E area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing. The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a Government-Owned, Government Operated (GOGO) facility.

There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only external source alternatives for most major T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA.

The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative. For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated.

Specific Alternatives:

In addition to this policy statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

DRAFT -- January 31, 1994

SUBJECT: INTERNAL CONTROL PLAN (ICP) FOR MANAGEMENT OF BRAC 95 TEST AND EVALUATION (T&E) JOINT CROSS-SERVICE GROUP

REFERENCES: (a) Defense Base Closure and Realignment Act of 1990 (P.L. 101-510 as amended by P.L. 102-190)

(b) USD(A&T) Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 3, 1994

(c) DEPSECDEF Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 7, 1994

1. Purpose. This memorandum describes the management controls that will guide and regulate the DoD Test and Evaluation (T&E) Joint Cross-Service Group's actions to comply with the requirements of reference (a) and the direction contained in references (b) and (c).

2. Background. Part A, Title XXIX of Public Law 101-510, as amended by Public Law 102-190 and Public Law 103-160, establishes the exclusive procedures under which the Secretary of Defense may pursue realignment or closure of military installations inside the United States, with certain exceptions. The law established independent Defense Base Closure and Realignment Commissions to review the Secretary of Defense's recommendations in calendar years 1991, 1993, and 1995. Reference (c) establishes six Joint Cross-Service Groups, one of which is the Test and Evaluation (T&E) Joint Cross-Service Group (T&EG). Reference (c) also directs that the T&EG must develop and implement an internal control plan for base realignment, closure, or consolidation studies to ensure the accuracy of data collection and analyses.

3. Scope. This internal control plan includes:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

4. Internal Control Mechanisms. The objective of the internal control mechanisms employed by the T&EG is to ensure the accuracy and completeness of the information upon which the T&EG decisions and recommendations will be based. The two principal control mechanisms are organization and documentation.

a. Organizational Controls. There are two organizations which have primary responsibility for the T&E contribution to the BRAC 95 process: The T&E Joint Cross-Service Group (T&EG) itself and the secretariat to the T&EG that has been established by the T&EG Action Plan. The T&EG Secretariat (T&EGS) has been tasked to develop procedures and methods to maintain the records required by the T&EG. The DoD Inspector General (DoD IG) services as technical advisor to the T&EG and as the field auditor for data gathered in support of T&EG activities. The specific responsibilities of these organizations for ensuring internal control requirements are met are as follows:

(1) T&E Joint Cross-Service Group (T&EG). The T&EG is charged with developing analyses guidance and criteria for the use of the DoD Components while conducting cross-service analyses in the T&E area, and for providing oversight of these analyses and making recommendations to the USD(A&T). The T&EG is responsible for ensuring a fair and complete evaluation is made of the T&E facilities and installations in accordance with the provisions of reference (a). This includes overseeing the compilations of required data and information; and making decisions regarding analyses guidelines, standards, assumptions, measures of merit, data elements, excess capacity, military value, and other impacts.

(2) Secretariat for T&E Joint Cross-Service Group (T&EGS). The chairs of the T&E Joint Group have established from members of their own staffs, a secretariat for the group. The secretariat is led by the Deputy Director, Test Facilities and Resources, (D,T&E) in close coordination with the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Minutes of T&EG meetings. The minutes will be kept by the representative from the DASD (Economic Reinvestment and BRAC) and will not be circulated. Coordination by the co-chairs will be required as a minimum.

- Descriptions of how base realignment and closure policies, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

(3) DoD Inspector General. Reference (c) states that the DoD Inspector General shall be available to assist the in developing, implementing, and evaluating internal control plans. The T&E Joint Cross-Service Group shall submit this internal control plan to the DoD IG for review and evaluation. If any data is collected directly as a result of the T&E Group's actions then the DoD IG will be requested to provide field audits that will review the supporting data and documentation used to develop the data that was submitted to the T&E Joint Cross-Service Group. The DoD IG will ensure audit standards are met and will advise the T&E Joint Group of any significant issues identified during the independent audit ass any such issues are identified.

b. Documentation Control. All significant events in the T&EG involvement in the BRAC 95 process will be promptly recorded and clearly documented to ensure the accuracy and completeness of the information used by the T&EG in performing evaluations of T&E facilities and installations. The following elements will be strictly adhered to:

(1) T&E Facility and Installation Data Base (TEFIDB). The TEFIDB will be the sole and authoritative data base for conducting cross-service analyses of T&E facilities and installations. The TEFIDB will contain all relevant data and information, pertaining to all T&E facilities and installations within the scope of the T&E Cross-Service Group. Specific procedures will be promulgated for development and maintenance of the TEFIDB. Elements included in the data base must have been certified in accordance with the attachment and will be subject to DoD IG source validity checks and data accuracy assessments.

(2) Certification. By the attached certification procedures, the Co-Chairs of the T&E Joint Cross-Service Group establish the policy implementing the requirements of the Act

that information submitted to the Secretary of Defense and to the Defense Base Closure and Realignment Commission must be certified as accurate and complete to the best of the certifier's knowledge and belief. The procedures outlined in that reference will ensure the accuracy and completeness of the data and information contained in the TEFIDB.

(3) Record Keeping. Minutes will be prepared by the representative of DASD (ER&BRAC) of all formal T&EG meetings which are part of the decision-making process in arriving at recommendations for base closure and realignment to be forwarded to the Secretary of Defense. Decision papers will be prepared to memorialize each decision made by the Group and the justification for that decision. All documents or data files on magnetic media forwarded from other sources, generated for the BRAC 95 process, and used for analyses, and all other documents that relate to the BRAC 95 process will be maintained in a library with controlled access by the T&EGS.

(4) Oral Briefings. From time to time, the T&E Cross-Service Group will receive formal and informal briefings from persons both in and out of the Federal government. If the T&EG considers any such briefing presents relevant and useful information or data, before such information or data can be entered into the TEFIDB, the T&EG must either (i) require the presenter (if a DoD employee) to reduce such information or data to writing, or (ii) request the appropriate DoD organization to replicate such information or data. In both cases, certification required by the attachment applies.

(5) Technical Experts. Technical experts will be utilized to support both the development and/or refinement of T&EG analytical efforts and its deliberations. When the T&EG utilizes the input of a technical expert, the specific contribution, notes, analyses, or other correspondence developed in support of the BRAC 95 process will be made a part of the TEFIDB. When technical experts provide information or data that the T&EG considers relevant and appropriate for consideration during their deliberations, the experts shall be requested to submit the information/data in writing with the required certification, so that it may be included in the TEFIDB. Whenever either the T&EG or the T&EGS incorporates the contribution of technical experts into the TEFIDB, the entry will include a description of the qualifications for designating an individual as a technical expert. For any information/data that is derived from an authoritative sources (e.g., a Federal, state, or local government agency), the document which includes the certification shall identify the source and provide adequate justification for relying on the source.

(6) Access to Data. Access to the TEFIDB will be limited to those persons identified by the T&EG and the T&EGS. Access to the TEFIDB by non-government personnel will be determined by the T&EGS and will be for the sole purpose of completing and maintaining the data base. Analyses of data from the TEFIDB will not be conducted by non-government personnel. Subsets of the TEFIDB will be provided as required to the DoD Components in the course of their analyses. During the periods when the data is in the custody of a DoD Component, the BRAC 95 Internal Control Procedures of the Component shall apply.

5. Responsibilities. The T&EG, the T&EGS, and the DoD IG will execute their responsibilities consistent with the provisions of references (b) and (c).

6. Implementation. This Internal Control Plan is implemented immediately and will be updated as necessary to enhance the level of management control needed to achieve the desired results of the references.

Charles E. Adolph Director Test and Evaluation	Lee H. Frame Acting Director Operational Test and Evaluation

Certification Procedures

PURPOSE.

The Defense Base Closure and Realignment Act of 1990, as amended (P.L. 102-190) requires a certification by each person who is in a position the duties of which include personal and substantial involvement in the preparation and submission of information and recommendations concerning the closure or realignment of military installations.

COMMITMENT TO DATA ACCURACY AND RELIABILITY.

The T&E Joint Cross-Service Group (T&EG) will take such efforts as are deemed necessary to ensure that the information used concerning the closure or realignment of an installation is complete, accurate, and reliable.

The T&EG will ensure that information submitted to the T&EG for the preparation of its recommendations to the USD(A&T) or the BRAC 95 Steering Group, and information that will be submitted through the T&EG to Secretary of Defense or the Commission be certified accurate and complete to the best of one's knowledge and belief. Certification statements will be used as further evidence and documentation that the information has been reviewed and validated.

The T&EG will use the DoD IG to conduct a detailed examination of methodologies employed, decision processes followed and data used.

PROCEDURES.

The T&EG will receive information and data primarily from the DoD Components, and from the T&E Board of Directors. Each of these sources shall identify to the T&EG one or more certifying officials who will certify all information or data provided to the T&EG for use in its deliberations or analyses.

Information that is obtained by the T&EG from other sources, such as previous or on-going T&E studies, will be submitted to the DoD Components for their review and certification.

GUIDANCE.

The Secretariat of the T&E Joint Cross-Service Group will issue any additional guidance concerting the certification requirement that becomes necessary. The T&EGS will require documentation form key individuals and organizations on the steps they are taking to ensure the accuracy and reliability of the information being provided.

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, February 8, 1994

Minutes

The fourth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, February 8, 1994. Mr. John Bolino and Mr. Nick Toomer chaired the meeting. A list of attendees is attached.

The meeting opened with the group agreeing to receive a short briefing on the Cost of Base Realignment Actions model at the next meeting.

The issue of approving meeting minutes was discussed. The group agreed to review and approve meeting minutes at the next meeting if they are available.

The group also agreed that the briefing on the Range Utilization Measurement System (RUMS) and its potential utility in defining measures and factors.

Discussion ensued on the straw man Statement of Objectives. The group decided to provide comments to Mr. Boyles at the next meeting for further discussion and approval.

A lengthy discussion ensued on the use of the T&E Board of Directors. The concern centers on a perception that the T&E Board of Directors will drive the BRAC process by developing measures and factors that can be viewed as predecisional. To ensure Group control is maintained, the Group agreed to create a sub-working group made up of Service and Defense Agency representatives to develop measures of merit outside the auspices of the Board of Directors. Additional taskings assigned to this subgroup are to (1) readdress the thresholds of $10 million investment cost and 100 personnel to identify a better boundary, (2) examine workload as a factor in our guidance to the Services, and (3) how to define the term "facility." They will discuss their progress at the next meeting.

The Group was reminded that comments on the draft outsourcing policy are due to Mr. Boyles by Feb 9.

The representative from the Laboratory Joint Cross-Service Group briefed the Group on their progress and focus.

The Group then discussed the possibility of asking that the OSD Base Closure and Utilization office design a BRAC process that all groups could use in developing measures of merit and guidelines. Mr. Boyles will check to see if this is possible.

The Group agreed that the next meeting will center on:

- Status of subgroup's progress
- Review and approve meetings minutes
- Review and approve the strawman on Statement of Objectives
- Brief each Service's BRAC process and COBRA overview

The meeting adjourned at 1055 hrs.

Approved:

Nicholas Toomer
Acting Co-Chairman

John Bolino
Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

February 8, 1994

List of Attendees

Mr. John Bolino, Acting Co-Chair
Mr. Nick Toomer, Acting Co-Chair
Mr. Irv Boyles, Co-Study Team Leader
Mr. Joe Moore, OSD OT&E
Mr. Carroll Jones, Air Force
Lt Col George London, Air Force
Mr. John Gehrig, Army
Mr. Robert Carter, Army
LTCOL Dave Powell, Army
Mr. Gerry Schiefer, Navy
CAPT Dave Rose, Navy
COL Tom Baker, OSD DISA
Dr. Don Linger, OSD Defense Nuclear Agency
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Tom Glenn, BMDO
Mr. Jim Thomas, OSD OT&E
MAJ Robin Pope, OSD DR&E
Mr. Frank Lewis, OSD PA&E
Ms. Jeanne Karstens, OSD Comptroller
Mr. Ray Spencer, DoDIG

Attachments

T&E JOINT CROSS-SERVICE GROUP

STATUS OF ACTIONS

February 8, 1994

Irv Boyles
DT&E/TFR

SUMMARY OF ACTION ITEMS REQUESTED BY 4 FEB

- Draft recommendations for
  - Measures of Merit
  - Guidelines
  - Assumptions

- Initial list of T&E facilities
  (Greater than $10 M replacement value or more than 100 people)

  Categorize facilities using Reliance taxonomy

- Feedback on Draft Outsourcing Policy

OVERVIEW

- Summary of Action Items
- Review of Responses
- Discussion Items

BASE CLOSURE SELECTION CRITERIA

In selecting military installations for closure or realignment, the DoD, giving priority consideration to military value (the first four criteria below), will consider:

Military Value

1. The current and future mission requirements and the impact on operational readiness of the Department of Defense's total force.

2. The availability and condition of land, facilities and associated airspace at both the existing and potential receiving locations.

3. The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.

4. The cost and manpower implications.

Return on Investment

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.

Impacts

6. The economic impact on communities.

7. The ability of both the existing and potential receiving communities' infrastructure to support forces, missions and personnel.

8. The environmental impact.

STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

DETERMINE FEASIBLE "OPPORTUNITIES" FOR THE SERVICES AND DEFENSE AGENCIES TO CLOSE OR REALIGN FACILITES AT MILITARY BASES THAT PERFORM T&E FUNCTIONS BY IDENTIFYING ALTERNATIVES IN OTHER SERVICES, OTHER GOVERNMENT AGENCIES, OR IN INDUSTRY.

ALTERNATIVES MAY EXIST DUE TO EXCESS CAPACITY OR UNDER-UTILIZATION, OR ORGANIZATIONAL OR MISSION CHANGES MAY REDISTRIBUTE WORKLOAD TO IMPROVE EFFICIENIES OR EFFECTIVENESS.

REVIEW OF RESPONSES
SUMMARY

		ARMY	AIR FORCE	NAVY	DISA
Draft Recommendations for:		Army and Air Force submitted a joint response			
	Measures of merit	Good listing of 8 measures with detailed discussion of attributes		Legal concerns	
	Guidelines	Input			
	Assumptions	Input			
Draft List of Facilities		Collection of inputs from Army activities	Update and expansion to earlier listing	Excerpts from Navy BRAC 93 data list of bases,facilities not specified. Data call for Feb 18 will be used to develop Navy input	List of JITC facilities
	By Reliance taxonomy	Some are categorized. Most are not.	Most are by modified Reliance taxonomy	Not addressed	Not addressed
Feedback on Draft Outsourcing Policy				Should have legal review, but concur	

DNA ?

REVIEW OF RESPONSES
SUMMARY

Army and Air Force Input to Measures of Merit

- **Good beginning for our list of measures**
  - 8 Measures of Merit
  - Attributes for each Measure
  - Detailed discussion for each Attribute
- **Comments**
  - Some items apply only to bases, not to T&E facilities on the bases. RECOMMENDATION: Focus on facilities only.
  - Economic impact on Service vs. DoD vs. role of Joint Cumulative Economic Impact Group
  - Projected workload methodology needs to be highlighted in analysis guidance (M.E., Att 3)
  - Placing facilities/bases into bands may be more of a description than an evaluation (M.E., Att 4)

REVIEW OF RESPONSES
SUMMARY

Army and Air Force Input to Assumptions

- Assumptions
  - Testing will be process oriented
  - DSMC definition of T&E
  - Facility criteria - >$10M PRV or 100 government employees
  - Bands used only for grouping
- Comments
  - Significance of "process oriented"?
  - Significance of "DSMC definition"?
  - Facility criteria must be verifiable
  - Consider groundrule assumptions; eg, core geographies
- References a BoD/BoOD Handbook - should be available to the members of T&E Joint Cross-Service Group

REVIEW OF RESPONSES
SUMMARY

Army and Air Force Input to Guidance

- Guidance
  - Use "assumptions" for T&E facility definitions
  - Include improvements/upgrades in FYDP
  - T&E FYDP as baseline to calulate costs and savings
  - Streamlining decisions at facility level
  - Retain essential technical capabilities by core competencies
  - Workload not a controlling factor
  - Avoid single node failure
  - Evaluation to consider several attributes
  - High priority to retain difficult to replace geographic assets
  - Recognize adaptability to future technologies

- Comments
  - Bands for categorization of both bases and facilities
  - Included some criteria statements (Relationship to Measures of Merit?)
  - Affordability to avoid single node failures

REVIEW OF RESPONSES
SUMMARY

Inputs to Bases and Facilities

- All inputs are preliminary
- In varying degrees of detail and completeness
- Need to develop a basic listing by each Component
  - Categorize by Reliance taxonomy
  - Common format and initial level of detail

REVIEW OF RESPONSES
SUMMARY

Army Input to Bases and Functions

- A broad collection of information

- Includes OT&E information
  - (AMSAA and OEC?)

- Additional data required:

  KMR
  Minor T&E Activities

REVIEW OF RESPONSES
SUMMARY

Air Force Input to Bases and Functions

- Provides an update to listing provided earlier
- All inputs should be at similar level of detail
- Does not include:

  OT&E or Evaluation facilities
  O&M funded facilities

REVIEW OF RESPONSES
SUMMARY

Navy Input to Bases and Functions

- Navy has no bases that are only T&E in function
  - Many bases have a T&E capability, but
  - Bases perform functions across the life cycle
- Response to Navy data call is due Feb 18
  - Excerpts provided from BRAC 93 data
  - Installations that support a number of functional areas

REVIEW OF RESPONSES
SUMMARY

DISA Input to Bases and Functions

- Input lists two facilities
- Only JITC meets criteria

DISCUSSION ITEMS

- Definition of test facility (e.g., WSMR as a whole, a specifiic range at WSMR, or an MPS-36). RECOMMENDATION: Adopt a work unit which provides a deliverable product to a user; eg, the specific range level. Differentiate between instrumentation and test facilities.

- Some facilities can be categorized by more than one Reliance area or function. (Some Army examples listed with 6-10 Reliance areas.) RECOMMENDATION: Select a primary only.

- Use of "Bands" for categorizing T&E facilities must not be confused with bases. RECOMMENDATION: Use full title as "T&E Facility Category Bands.

- Consider "groundruling" essential core geographical features such as airspace, ground space, terrain, climate, secure, and/or electromagnetically protected area to be preserved regardless of managing installation. RECOMMENDATION: Identify core geographies, not installations or Services.

PROPOSED FORMAT FOR LIST OF T&E FACILITIES

Facility

Installation (MILITARY BASE)

Location (City and State)

Reliance Taxonomy Categories

Reliance Function Categories (HWIL, OAR, etc)

MODIFIED RELIANCE TAXONOMY

Weapon Systems

- Air Vehicles
- Land Vehicles
- Naval Systems
- Space Systems
- C4I Systems

Disciplines

- Munitions
- Electronic Combat
- Nuclear Effects
- Chem/Bio
- Propulsion
- Environmental Effects
- T&E Support Aircraft

REVIEW OF RESPONSES
OTHER COMMENTS

- Navy comment that outsourcing policy should have legal review, but concur with draft

- Navy comment that cost data should only include cost data elements necessary to support COBRA

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, February 15, 1994

Minutes

The fifth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, February 15, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The Group discussed methodologies reviewing meeting minutes. The Group agreed that numbered copies will be sent out prior to the next meeting for review. At the meeting the minutes will be collected after discussion and approval.

The Services then provided briefings on their respective BRAC processes (slides attached).

The Army representative then provided the Group an overview of the Cost of Base Realignment Actions model (slides attached).

The Group then began a discussion on the subgroup's progress on defining thresholds. There was concern that thresholds established at this point would prevent the Group from analyzing a facility as a receiver. The Group agreed that this will have to be taken into consideration and asked the subgroup to continue examining potential thresholds for data collection.

Extensive discussion ensued on the level of detail the Group should use in defining categories and subcategories for measures of merit. Also discussed was the pertinence that the Range Utilization Measures Study framework can provide in establishing measures and factors. The Group agreed that the subgroup should discuss the use of RUMS as part of defining what level of detail functions and facilities will be considered for study. The results will be discussed at the next meeting.

The meeting adjourned at 1247 hrs.

Approved: L R Frame — Lee Frame, Co-Chairman

J. V. Bolino — John Bolino, Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

February 15, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Acting Co-Chair
Mr. Irv Boyles, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Col Rob Bongiovi, Air Force
Lt Col Bryon Echols, Air Force
Lt Col Mike Callaghan, Air Force
Mr. Doug Nation, Air Force
Mr. Jere Brinkley, Air Force
Mr. John Gehrig, Army
LTC David Powell, Army
MAJ Essex Fowlks, Army
Mr. Tom Roller, Army
Mr. Gerry Schiefer, Navy
CAPT Dave Rose, Navy
Ms. Anne Rathmell Davis, Navy
Mr. Phil Brady, AFFTC/XR
Dr. Don Linger, OSD Defense Nuclear Agency
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Ms. Kathleen Ruemmele, BMDO
Mr. Jim Thomas, OSD OT&E
Mr. Bruce German, OSD T&E
Mr. Mark Paulson, OSD DDR&E
Ms. Jeanne Karstens, OSD Comptroller

BASE REALIGNMENT AND CLOSURE (BRAC 95)

THE ARMY BASING STUDY (TABS) UPDATE

15 ~~8~~ FEB 94

AGENDA

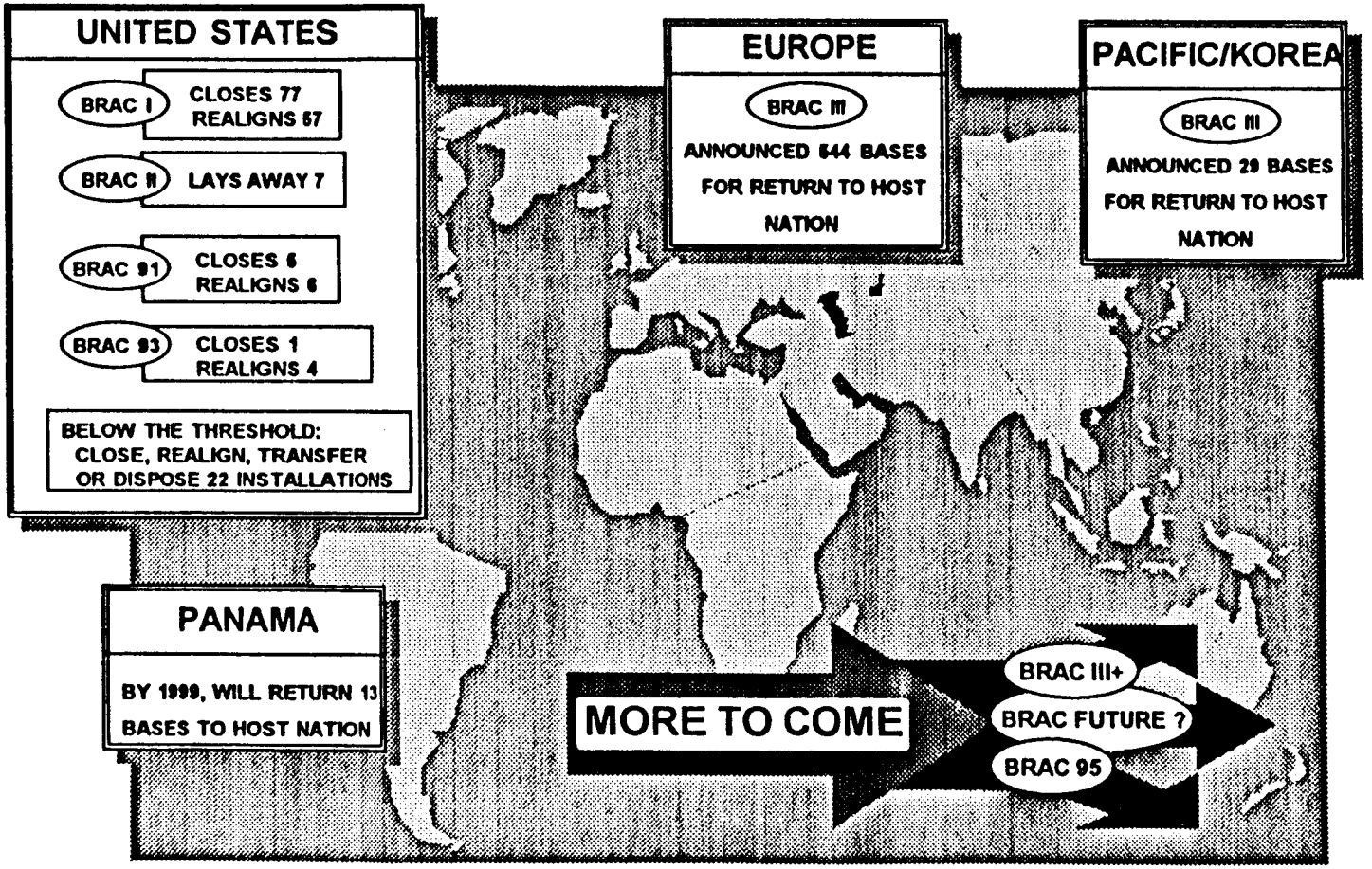
Background

Key Players

Process

Summary

BRAC - THE BIG PICTURE



- ALMOST 20% OF CONUS INSTALLATIONS TO BE CLOSED
- APPROXIMATELY 60% OF EUROPEAN SITES ANNOUNCED FOR RETURN
- APPROXIMATELY 30% OF PACIFIC/KOREA SITES ANNOUNCED FOR RETURN

LESSONS LEARNED - BRAC 93

THE COMMISSION SAID -

-- OSD MUST SUPERVISE-GET ON WITH CROSS-SERVICE REALIGNMENTS

-- THE ARMY'S PROCESS AND IMPLEMENTATION WERE SOUND, BUT... (FT MONROE, DLI, THE DEPOTS)

FROM THE FIELD -

FOUR STAR VIEWS WERE NOT ALWAYS FAIRLY REPRESENTED

FROM OUR STAFF -

-- ARMY BASING STRATEGY WAS TOO GENERAL

-- MACOM VISIONS DID NOT DRIVE ANALYSIS

-- INSTALLATION ASSESSMENTS WERE NOT TIED TO THE PROCESS

-- CANDIDATE SELECTION PROCESS WAS NOT CLEAR

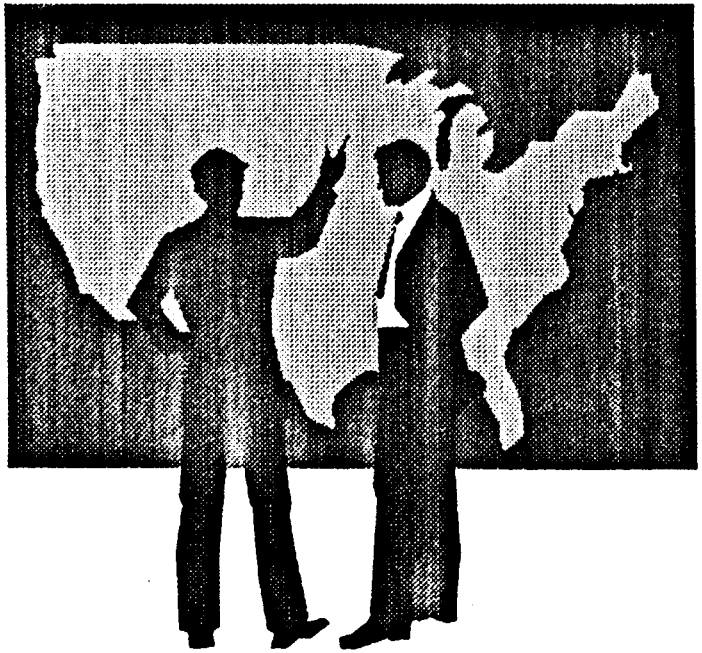
-- PUBLIC AFFAIRS BECAME A NIGHTMARE

THE TABS PHILOSOPHY

- START EARLY
- INVOLVE SENIOR LEADERSHIP FROM THE BEGINNING
- INVOLVE MACOMS, ARSTAF SECRETARIAT FULLY
- ENSURE PROCESS IS LOGICAL AND CONSISTENT WITH AUDIT TRAIL
- MAINTAIN OPEN PROCESS BUT AVOID PREMATURE DISCLOSURES
- VIEW ALL INSTALLATIONS ON LEVEL PLAYING FIELD
- DON'T CONSIDER POLITICS -- DO WHAT'S RIGHT
- PRODUCE DEFENSIBLE RECOMMENDATIONS
- LOOK BEYOND BRAC 95
- ENSURE EFFECTIVE AND TIMELY TRANSITION TO IMPLEMENTATION

CHALLENGES FOR BRAC 95

- COMMISSION MORE EXPERIENCED & PREPARED
- OSD EXPECTATIONS -- A "DEEP BRAC"
- INCREASED DRIVE TO ACCOMPLISH CROSS-SERVICE REALIGNMENTS



- POTENTIAL ROLES & MISSION CHANGES
- AFFORDABILITY REQUIREMENTS
- COMMUNITY / CONGRESSIONAL PRESSURE
- ARMY CONSENSUS BUILDING

OPPORTUNITY

✓ **Strategy**

US Armed Forces adopted
a "power projection" strategy

✓ **Force Structure**

Bottom-Up Review provided
general guidance for the
Army's Force Structure

Post - Cold War Army

? ***Base Structure***

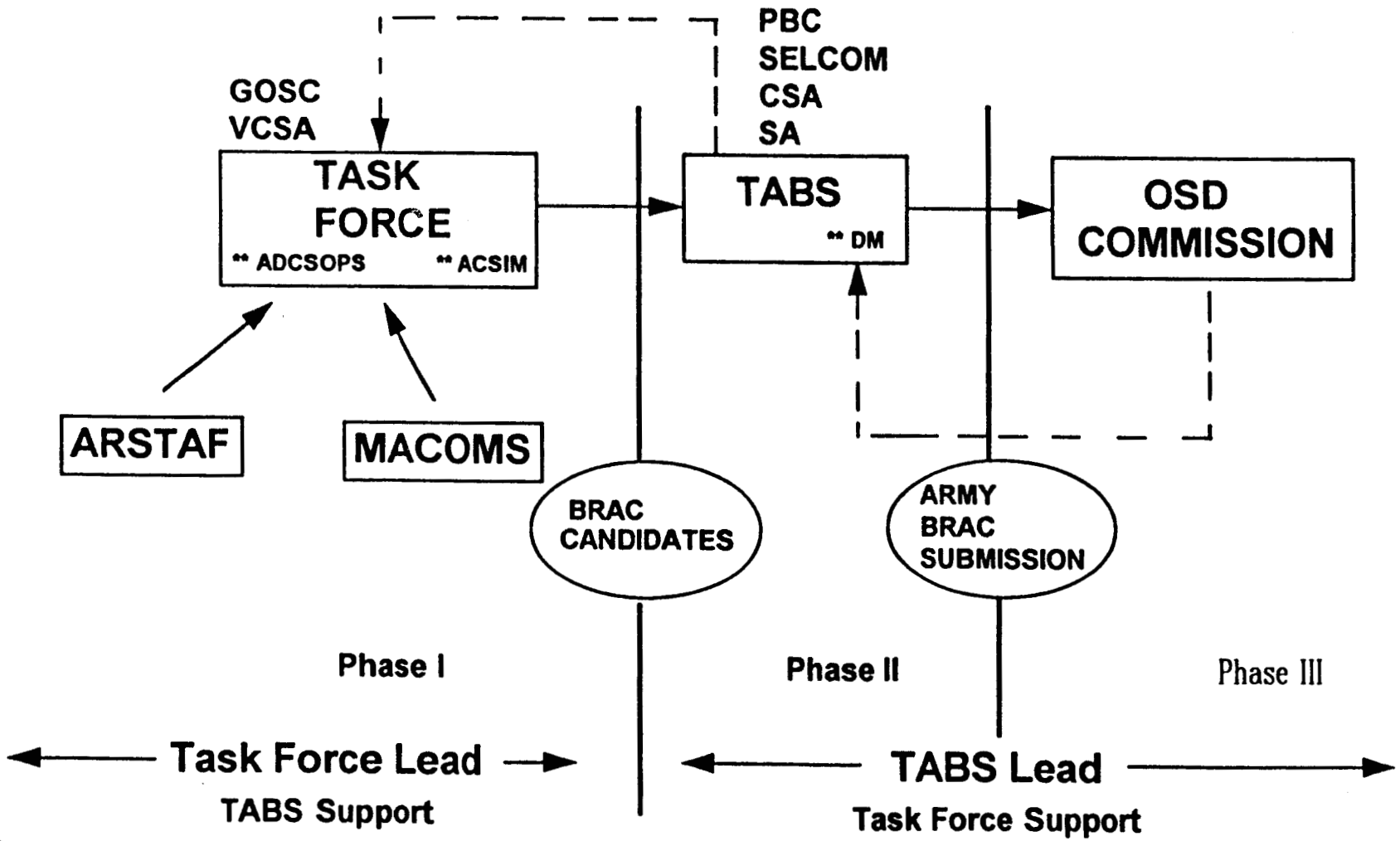
BRAC '95 will establish base structure
to support the force structure
in the execution of the strategy

These define the parameters within which the post-Cold War Army must operate

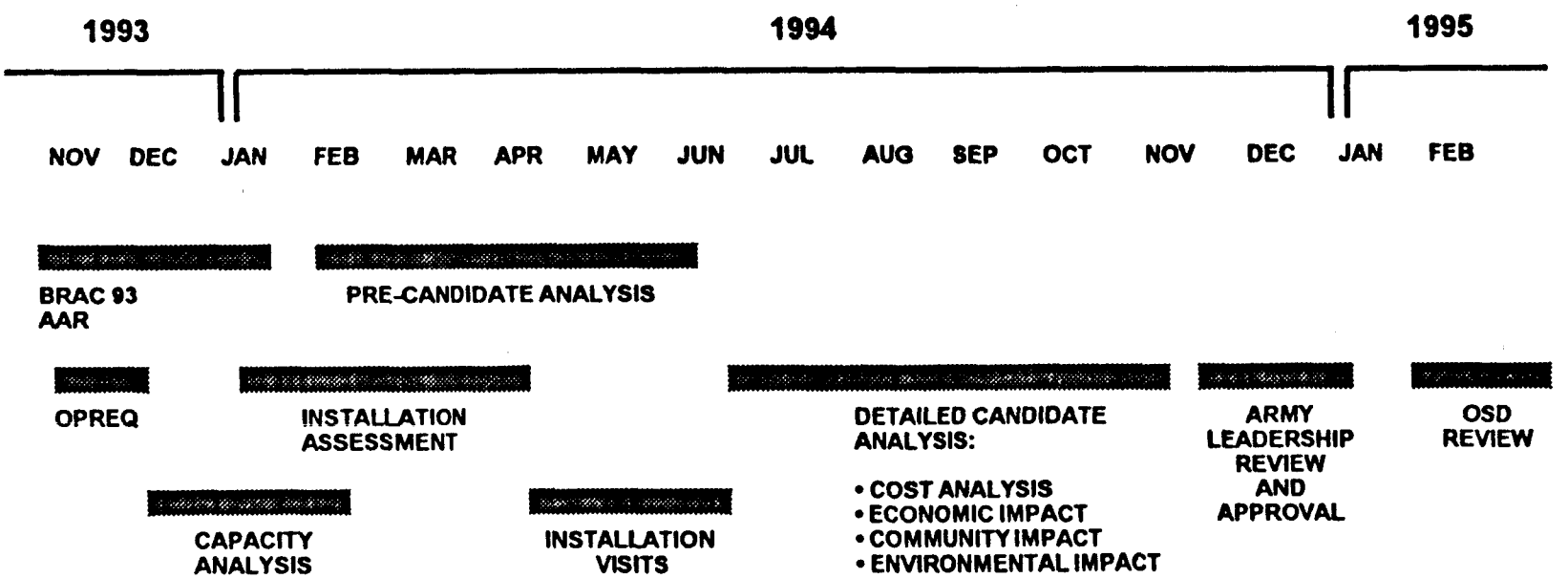
BRAC 95
ARMY KEY PLAYERS

ASSISTANT SECRETARY FOR INSTALLATIONS, LOGISTICS, AND ENVIRONMENT	• OVERALL POLICY GUIDANCE AND OVERSIGHT
DEPUTY CHIEF OF STAFF FOR OPERATIONS AND PLANS	• STATIONER OF THE ARMY • ESTABLISHES ARMY REQUIREMENTS AND PRIORITIES
ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT	• INSTALLATION MANAGER
THE ARMY BASING STUDY OFFICE	• FORMULATES BRAC RECOMMENDATIONS • ARMY INTERFACE WITH COMMISSION
ARMY AUDIT AGENCY	• AUDIT OVERSIGHT • GAO INTERFACE

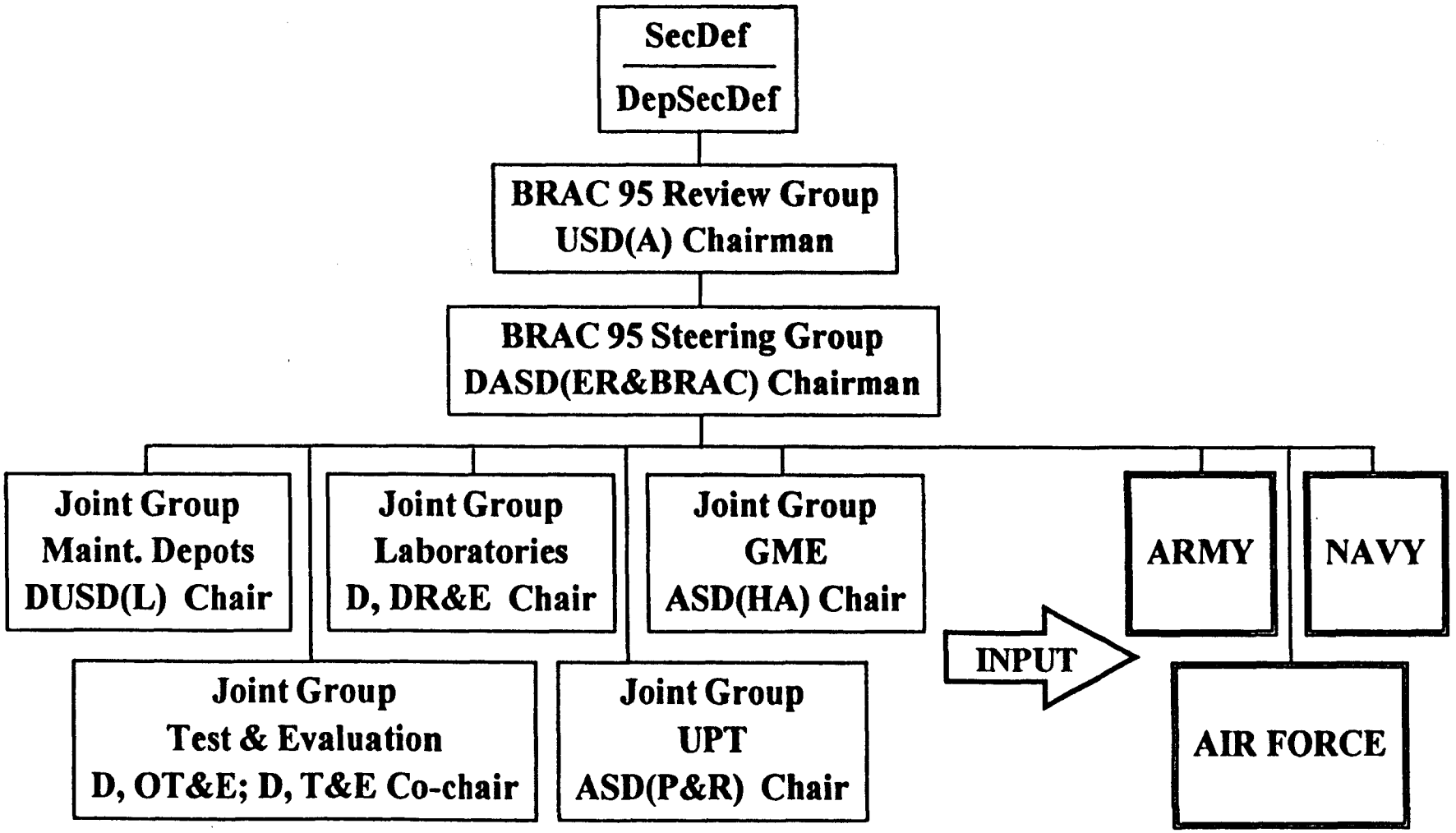
BRAC 95 PROCESS



BRAC TIMELINES



OSD BRAC 95 Management Structure



SUMMARY

WHY IS BRAC SO DIFFICULT?

- OSD DOES NOT FULLY RECOGNIZE :
  - -- ARMY'S PREVIOUS BRAC ACHIEVEMENTS
  - -- LAND INTENSIVE NATURE OF ARMY'S MISSION
- MOST COMMISSIONERS:
  - -- LACK KNOWLEDGE ABOUT THE ARMY
  - -- ARE UNDER INTENSE PRESSURE TO CONSIDER OTHER OPTIONS
- SERVICE RECOMMENDATIONS MUST BE SUPPORTED BY AN AUDITABLE DECISION MAKING PROCESS
- EVERY BASE IS PROTECTED BY SOMEONE -- POLITICIANS GET INVOLVED AT ALL LEVELS
- PREMATURE DISCLOSURES ARE CATASTROPHIC -- PUBLIC OPPOSITION IS SOPHISTICATED AND EFFECTIVE

SUMMARY

ON THE POSITIVE SIDE:

- ARMY IS TAKING A PROACTIVE APPROACH
- BRAC IS AN OPPORTUNITY TO DIVEST UNNECESSARY INFRASTRUCTURE AND RESHAPE THE ARMY
- THE DEPARTMENT RETAINS ANALYTICAL CONTROL OVER THE VAST MAJORITY OF ITS INSTALLATION STRUCTURE

Department of the Navy

Base Realignment and Closure

BRAC-95

Process

SECNAVNOTE 11000

of 8 December 199~~4~~3

ORGANIZATION

- Base Structure Evaluation Committee
- Base Structure Analysis Team

CONTROLS

- Naval Audit Service
- Certification

BRAC-95 INSTALLATION CATEGORIZATION

Operational Support
Operational Air Stations
Reserve Air Stations
Naval Bases
Marine Corps Bases
Supply Centers
Communications
Security Groups
Surveillance
Naval Facilities
Naval Satellite Op Centers
Construction Bn Centers
Misc Other Support

Industrial Support
Weapons Stations
Aviation Depots
Shipyards
Public Works Centers
Marine Corps Logistics Bases
Supervisor of Shipbuilding
Inventory Control Points
Industrial Reserve Plants
Naval Reserve Maint. Facilities

Tech Centers/Labs
Technical Centers/Labs

Education/Training
Training Air Stations
Training/Educational Centers

Personnel Support/Other
Medical/Dental
Administrative Activities
National Captial Region
Reserve Centers

SELECTION CRITERIA

Military Value

1. The current and future mission requirements and the impact on operational readiness of the Department of Defense's total force.

2. The availability and condition of land, facilities and associated airspace at both the existing and potential receiving locations.

3. The ability to accommodate contingency, mobilization, and future total force requirements at both the existing and potential receiving locations.

4. The cost and manpower implications.

Return on Investment

5. The extent and timing of potential costs and savings, including the number of years, beginning with the date of completion of the closure or realignment, for the savings to exceed the costs.

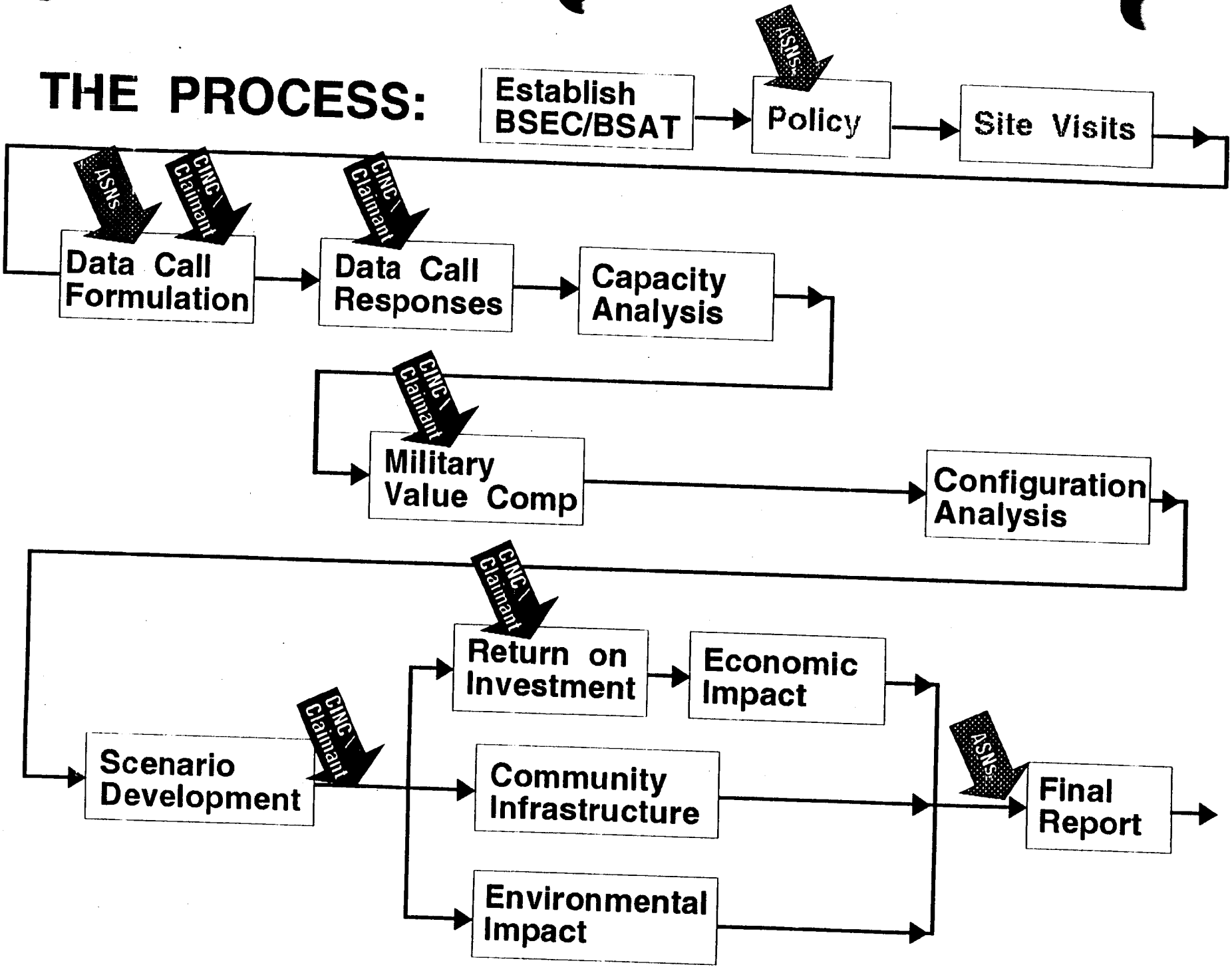
Impacts

6. The economic impact on communities.

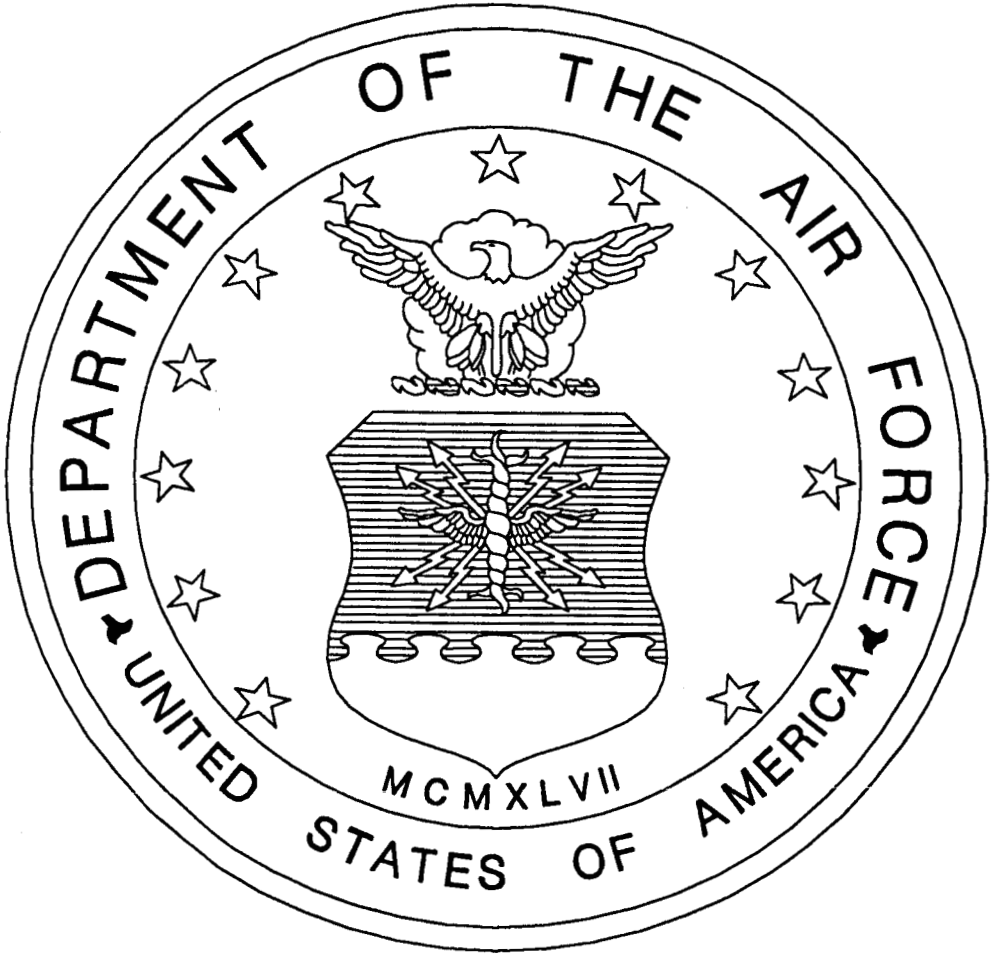
7. The ability of both the existing and potential receiving communities' infrastructure to support forces, missions and personnel.

8. The environmental impact.

THE PROCESS:


Establish BSEC/BSAT
ASNs
Policy
Site Visits
ASNs
CINC \ Claimant
Data Call Formulation
CINC \ Claimant
Data Call Responses
Capacity Analysis
CINC \ Claimant
Military Value Comp
Configuration Analysis
CINC \ Claimant
Return on Investment
Economic Impact
CINC \ Claimant
Scenario Development
Community Infrastructure
Environmental Impact
ASNs
Final Report

1993 USAF



BASE CLOSURE PROCESS

COBRA
COST OF BASE REALIGNMENT ACTIONS

AGENDA:

- COBRA HISTORY
- HOW COBRA WORKS
- BRAC 95 IMPROVEMENTS
- QUESTIONS/DISCUSSION

DOD CRITERIA

- SUBELEMENTS
- QUESTIONS
- DATA

FORCE STRUCTURE

BASES CONSIDERED

CATEGORIZATION

WHICH ONES?

BASE EXCLUSIONS
- ESSENTIAL MISSION
- GEOGRAPHICALLY KEY

BASE GRADING
- RED, YELLOW OR GREEN
- BY SUBELEMENTS
- BY CRITERION

GROUPING
- GROUP I, II, OR III

HOW MANY?

- CAPACITY ANALYSIS

- CATEGORY EXCLUSIONS
  - NO EXCESS CAPACITY

COBRA
COST OF BASE REALIGNMENT ACTIONS
HISTORY

- DEVELOPED BY THE LOGISTICS MANAGEMENT INSTITUTE AS A LOTUS SPREADSHEET IN 1987.
- USED IN THE 1988 AND 1989 ROUND OF BASE CLOSURE (BRAC I and BRAC II).
- CONVERTED TO PASCAL CODE IN 1990 BY R&K, INC .
- USED BY ALL DOD AGENCIES IN BRAC 91 ROUND OF BASE CLOSURES.
- ARMY APPOINTED EXECUTIVE AGENT IN JAN 1992, JOINT PROCESS ACTION TEAM (JPAT) FORMED.
- COBRA USED AS DoD APPROVED MODEL IN 1993 .
- REFINEMENTS FOR BRAC 95 ARE UNDERWAY.

COBRA
COST OF BASE REALIGNMENT ACTIONS

COBRA DESCRIPTION

- A COMPARATIVE TOOL
- CALCULATES THE COST OF A USER DEFINED SCENARIO
- DOES NOT OPTIMIZE
- DETERMINISTIC
- DESIGNED TO COUNT ONLY "BRAC" COSTS

COBRA
COST OF BASE REALIGNMENT ACTIONS

HOW COBRA WORKS

COBRA DEVELOPS COST COMPARISONS BASED ON **THREE KEY COSTS**:

1. COST OF OPERATION AT THE PRESENT LOCATION(s)
   - Personnel Costs (Salaries, VHA)
   - Overhead(BOS,RPMA,IMA)

2. COST OF OPERATION AT THE NEW LOCATION(s)
   - Personnel Costs (Salaries, VHA)
   - Overhead(BOS,RPMA,IMA)

3. COST OF THE MOVE
   - Military Construction
   - PCS Costs (DARSE,HAP,)
   - Transportation (Freight, Vehicles, Equipment)
   - Personnel Costs (Severance Pay, Unemployment, New Hire Costs)

COBRA
COST OF BASE REALIGNMENT ACTIONS

DATA INPUTS

STANDARD FACTORS:
(Model Specific)

- MILCON FACTORS($/SQFT)
- TRANSPORTATION FACTORS:
  - WEIGHT TO MOVE
  - COST TO PACK,UNPACK
  - COST TO MOVE
- AVERAGE SALARIES
- AVG ENTITLEMENTS:
  - HAP
  - DARSE
  - PPS
  - EARLY RETIREMENT
  - SEVERANCE PAY
- INFLATION/DISCOUNTING

STATIC FACTORS:
(Installation Specific)

- INSTALLATION POPULATION
- COST TO OPERATE INSTALLATION
- AREA COST FACTORS:
  - VHA
  - PER DIEM
  - MILCON FACTOR

DYNAMIC FACTORS:
(Scenario Specific)

- WHO MOVES
- WHO GETS ELIMINATED
- SPECIAL/UNIQUE COSTS
  - AVOIDANCES
  - UNIQUE MOVING
  - MISC COSTS

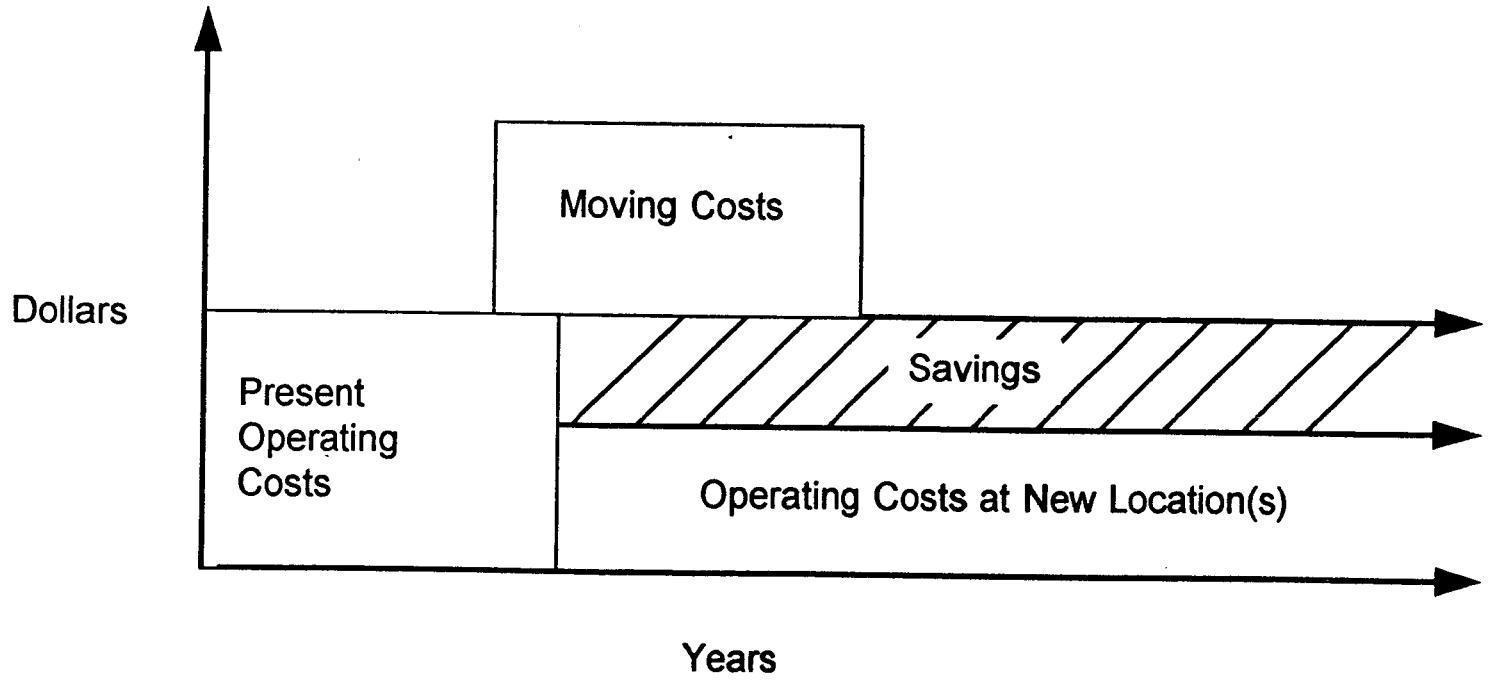
COBRA
COST OF BASE REALIGNMENT ACTIONS

HOW COBRA CALCULATES THE "COST" OF A REALIGNMENT ACTION:

1. CALCULATES THE COST OF CURRENT OPERATIONS.
2. CALCULATES THE COST OF OPERATIONS AFTER THE MOVE.
3. CALCULATES THE COST OF THE MOVE. (ONE TIME COSTS)
4. SUBTRACTS THE PRESENT OPERATING COST FROM FUTURE OPERATING COST.
5. ADDS THE COST OF THE MOVE.

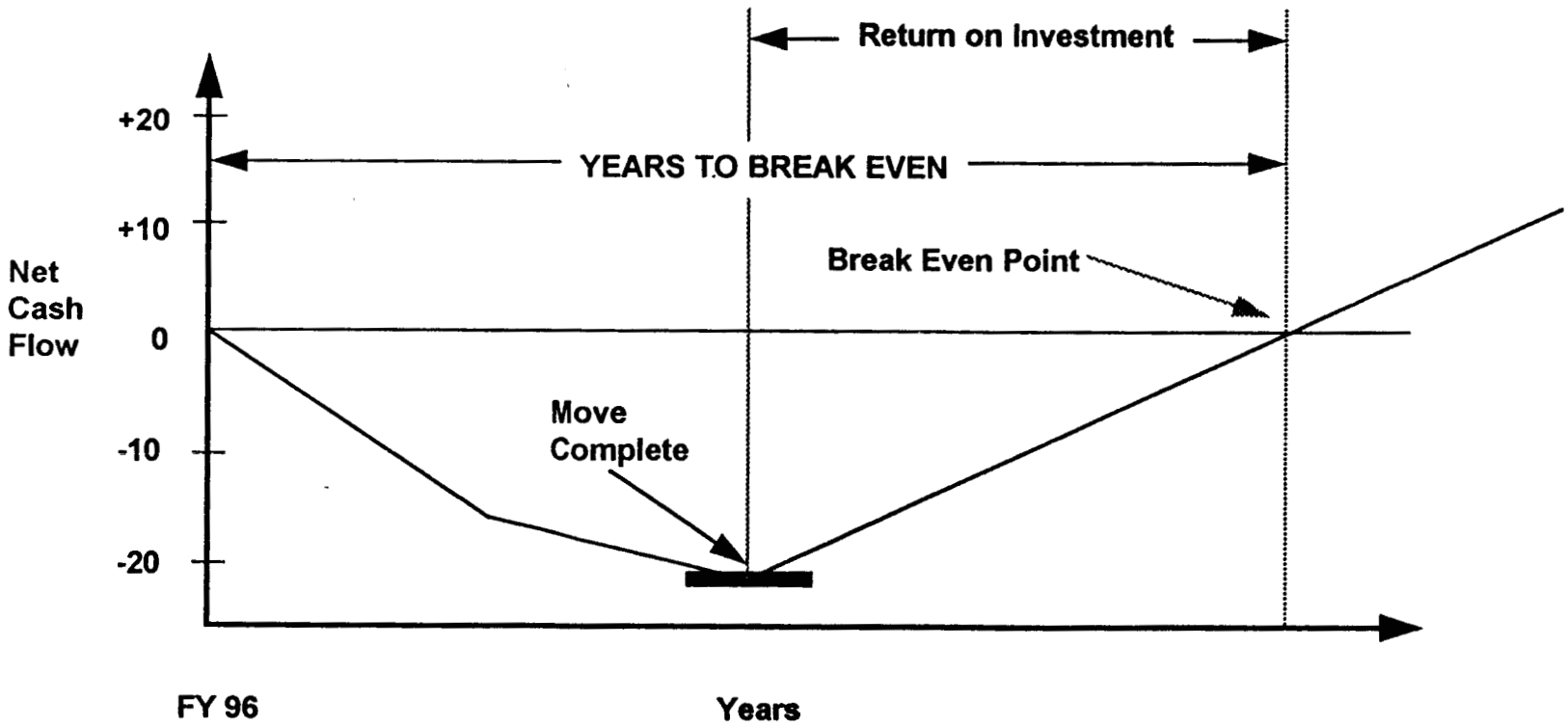
COBRA
COST OF BASE REALIGNMENT ACTIONS

HOW COBRA CALCULATES THE "COST" OF A REALIGNMENT ACTION:



COBRA
COST OF BASE REALIGNMENT ACTIONS

COBRA "PAYBACK" PERIOD



COBRA
COST OF BASE REALIGNMENT ACTIONS

DATA ESTIMATION PRINCIPALS:

1. WHEN UNCERTAINTY EXISTS: OVERESTIMATE COSTS.
2. WHEN UNCERTAINTY EXISTS: UNDERESTIMATE SAVINGS.
3. TREAT ALL INSTALLATIONS EQUALLY.

COBRA
COST OF BASE REALIGNMENT ACTIONS

ANALYST INPUT: THE REAL WORK IN COBRA ANALYSIS

STANDARD PROCEDURES:

INTERNAL CONTROL PLAN
COBRA USER'S MANUAL
ALTERNATIVE DOCUMENTATION PROCEDURES

OTHER:

INTUITION -- KNOWLEDGE -- JUDGMENT

COBRA
COST OF BASE REALIGNMENT ACTIONS

IMPROVEMENTS FOR BRAC 95

- REFINE THE INTERNAL PROCESS OF CALCULATING OUTPUT
- CORRECT MINOR ERRORS IN ALGORITHMS
- MAKE IT MORE USER FRIENDLY
- AAA ALGORITHM VALIDATION

T&E JOINT CROSS-SERVICE GROUP

STATUS OF ACTIONS

February 15, 1994

SPECIAL ACTION SUBGROUP
Irv Boyles
DT&E/TFR

STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

Determine opportunities for the DoD Compontents (Services and Defense Agencies) to close, realign, or consolidate facilities/capabilities that perform test or evaluation functions.

This will be accomplished by identifying alternatives in the Services and Defense Agencies, other government agencies, or in industry.

TASKS OF T&E JOINT CROSS-SERVICE GROUP

- Analysis Guidance, Assumptions, Stardards, Measures of Merit, and Data Elements

- Recommendations to Services and Defense Agencies to Include:

  A list of all DoD test and evaluation facilities/capabilities (identified by Recommendation Band) as to their potential for closure, realignment, or consolidation (coordinated with Labs and Depot Maintenance Groups).

  A list of all (DoD and non-DoD) test and evaluation facilities/ capabilities projected to have excess capacity or be under-utilized or determined to be capable of absorbing other workload.

  A list of DoD bases that could accommodate relocation of current test or evaluation facilities/capabilities with reinvestment.

  A list of outsourcing opportunities determined feasible.

SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
1 Jun		Collect and analyze data, submit results to T&E Group
Jun-Jul	Analyze results for cross-Service opportunities	
15 Jul	Issue recommendations and targets	
Jul - Oct		Factor recommendations into each Component's BRAC process
15 Nov		Submit Component BRAC Reports
15 Dec	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

PROPOSED GUIDANCE TO DoD COMPONENTS

- Use T&E facility/capability guidance definition (attached)
- Include funded investments for new facilities/capabilities through FY95
- Include improvements/upgrades in FYDP to determine investment cost
- Use FYDP as baseline to calculate costs and savings
- Closure/realignment decisions at facility level
- Retain essential technical capabilities for core competencies/technologies
- Workload used to the degree it can be confidently forecasted/validated based on historical experience
- Identify impacts of single node failure
- Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing
- Retain difficult-to-replace essential geographic assets without regard to "ownership"
- Recognize adaptability to future technologies
- Environmental cleanup costs/difficulties are not to be considered for closure or downsizing a facility/capability
- Use definitions from RUMS for "capacity" and "utilization" (attached)

GUIDANCE FOR QUALIFYING AS A T&E FACILITY/CAPABILITY

A set of DoD-owned or -controlled real property, and/or equipment, platforms, ADPE and instrumentation that provides (or can provide) a deliverable test or evaluation product for any one of the following functions: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed system, open air range, or test mission support.

Thresholds for consideration:

- $10M investment cost (acquisition + improvement/upgrade costs adjusted for inflation to FY94), OR

- 100 personnel involved in the operation, maintenance, and administration (civilian, military, and contractor)

Can support test or evaluation of components through systems and platforms in the following categories: air, land, naval, space, C4I, munitions, electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, directed energy, guidance, materiels.

Includes all funding sources (RDT&E, procurement, O&M, training,etc).

MODIFIED RELIANCE TAXONOMY

Weapon Systems

- Air Vehicles
- Land Vehicles
- Naval Systems
- Space Systems
- C4I Systems
- Directed Energy

Disciplines

- Munitions
- Electronic Combat
- Nuclear Effects
- Chem/Bio
- Propulsion
- Environmental Effects
- T&E Support Aircraft

STATEMENT OF OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

The T&E Joint Cross-Service Group has been directed by the DEPSECDEF to "identify necessary outsourcing policies and make recommendations regarding those policies." This paper contains the material to meet this requirement.

Terminology:

Government Owned, Contractor Operated (GOCO). The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

Contracted Out. Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

Policy:

The policy concerning "outsourcing" for T&E facilities and bases is:

a. In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility or the base.

b. Outsourcing alternatives will include:

(1) Contracting-out the operation of the existing T&E facility,
(2) Converting the base to a GOCO, or
(3) Transferring the workload to another existing federal government or commercial test facility.

c. The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility.

There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

Outsourcing Goal:

In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector. Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Discussion:

While outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions, there is a limited application of this alternative to the T&E area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing. The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a Government-Owned, Government Operated (GOGO) facility.

There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only external source alternatives for most major T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA.

The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative. For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated.

Specific Alternatives:

In addition to this policy statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

Policy

- In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility/capaability or the base.

- Outsourcing alternatives will include:
  - Contracting-out the operation of the existing T&E facility,
  - Converting the base to a GOCO, or
  - Transferring the workload to another existing federal government or commercial test facility.

- The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility. There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

TERMINOLOGY

- **Government Owned, Contractor Operated (GOCO).**

  The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

- **Contracted Out.**

  Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

Outsourcing Goal

- In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector.

  Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Specific Alternatives

- The T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP
Discussion

- It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative

- For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated

- Outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions

  - There is a limited application of this alternative to the T&E area

  - Commercial testing companies do exist and provide capability mostly at the subsystem and component level

  - Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing

OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP
Discussion (cont.)

- The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a GOGO facility.

- There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases.

- The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership.

NEXT ACTIONS
SPECIAL ACTION SUBGROUP

Meet 16 Feb 1994, 1C370 Conf. Room

Tasks:

- Review strawman for:
  - Groundrules
  - Standards
  - Products
  - Measures of Merit and Macro Data Elements

PROPOSED GROUNDRULES

Workload for test and evaluation facilities and capabilities is primarily a function of the RDT&E budget line, which is expected to decline by 15% by 1999. Updates to operarational systems account for the next largest portion, and is not expected to decline. Workload is not a function of force structure.

At least one test facility/capability will be required to address any technology in use or nearing maturation at the system or mission level. Geographic assets must be adequate to acommodate the envelopes afforded by these technologies.

Closure or realignments of laboratories, maintenance depots, and training activities could necessitate consolidation with test facilities/capabilities.

Evaluation of developing technologies and systems may follow a process that involves a progression of test facilities/capabilities. This progression may contiune from modeling and simulation, and component measurement, through hardware-in-the-loop, system integration laboratories, installed-system, to open air or field.

PROPOSED STANDARDS

All Services and Defense Agencies are to collect the same data elements, use same definitions as required by the T&E Joint Cross-Service Group.

"Test facilities/capabilities" refers to DoD-owned support facilities or capabilities available to collect and produce data under specified conditions as required by developmental or operational test program, mission, or project; maintenance verification; experiment; live fire; tactics development; shelf life; production testing; foreign comparative testing; or foreign material exploitation and sales.

"Evaluation facilities/capabilities" refers to DoD-owned activities that plan data requirements and analysis approaches; review, analyze, and synthesize data collected from various sources (including testing); and assess or evaluate performance, effectiveness, suitability and programmatic risks.

PROPOSED GROUNDRULES (CONT.)

Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide DIS internetting capability are programmed in FYDP.

Facilities/capabilities used for pure research should not be considered eligible to absorb T&E workload. Examples are facilities/capabilities that:

a. do not have production potential for throughput, or

b. that are expected to continue throughout the FYDP to be "research" themselves (e.g., their calibration or procedures are questionable)

PROPOSED PRODUCTS
(FOR T&E JOINT CROSS SERVICE GROUP)

Potential Sending Bases (TYPE 1)

Identification of test or evaluation facilities/capabilities that can be closed, realigned, or consolidated elsewhere (identified in recommendation bands).

Potential Receiving Bases (TYPE 2)

Identification of bases that can absorb test or evaluation, lab, maintenance, or training workload (existing facility/capability).

Identification of bases having core test or evaluation facilities that can accommodate relocation of a test or evaluation, lab, depot, or training facility/capability (new facility/capability).

Potential Outsourcing Options (TYPE 3)

Identification of test or evaluation facilities/capabilities outside of DoD that could absorb workload (existing).

Identification of alternatives to having an in-house DoD facility/capability for test or evaluation.

PROPOSED MEASURES OF MERIT FOR POTENTIAL SENDING BASES (TYPE 1)

Measures for identification of T&E facilities/capabilities that can be closed, realigned, or consolidated elsewhere (identified in recommendation bands).

Measures of Merit: **Type of Facility/Base**
Current and Forecasted Utilization

Type of Facility/Base

Description of Base/Facility within scope of "Bands"

Current and Forecasted Utilization

Projected Workload - Total test hours projected for current and future years

Current Capacity - Total test hours available for use and limiting resource

Historical Capacity - Total test hours used in prior years

Test Facility Utilization - Current and future capacity utilization

Mission Overhead - Ratio of reimbursable test costs to total test costs

Test Overhead on Installation - Ratio of total test costs to total installation costs

PROPOSED MEASURES OF MERIT FOR POTENTIAL RECEIVING BASES (TYPE 2)

Identification of bases that can absorb test or evaluation workload (existing facility/capability).

Measure of Merit: Current and Forecasted Utilization

Projected Workload - Total test hours projected for current and future years

Current Capacity - Total test hours available for use and limiting resource

Historical Capacity - Total test hours used in prior years

Test Facility Utilization - Current and future capacity utilization

Mission Overhead - Ratio of reimbursable test costs to total test costs

Test Overhead on Installation - Ratio of total test costs to total installation costs

PROPOSED MEASURES OF MERIT FOR POTENTIAL RECEIVING BASES (TYPE 2)
(Cont.)

Identification of bases that can accommodate relocation of a test or evaluation facility/capability (new facility/capability).

Measure of Merit: Ability to Accept New Facility/Capability

Total landspace, airspace, and seaspace available for expansion - Acres and sq miles (Within the facility or installation and outside of the facility or installation)
Expandability - Building sq footage for new activities
Environmental Capacity - Ability to expand considering environmental factors
Current and Projected Encroachment - Population or air/sea traffic density
Infrastructure, Utilities - Ability to support expansion at test facility
Infrastructure, Communications Support - Ability to support expansion at test facility

PROPOSED MEASURES OF MERIT FOR POTENTIAL OUTSOURCING OPTIONS (TYPE 3)

Identification of test or evaluation facilities/capabilities outside of DoD that could absorb workload (existing).

Measure of Merit: Ability of non-DoD location to Accept Workload

Total landspace, airspace, and seaspace available for expansion - Acres and sq miles (Within the facility or installation and outside of the facility or installation)
Expandability - Building sq footage for new activities
Environmental Capacity - Ability to expand considering environmental factors
Current and Projected Encroachment - Population or air/sea traffic density
Infrastructure, Utilities - Ability to support expansion at test facility
Infrastructure, Communications Support - Ability to support expansion at test facility

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, February 22, 1994

Minutes

The sixth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, February 22, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The Group reviewed and approved the meeting minutes for meetings held on February 8 and 15.

The Group then received a briefing (attached) on the Range Utilization Measurement System.

Discussion then ensued on the progress of the subgroup (attached). The first item opened for discussion was the revised Statement of Objective. The Group was concerned that all Defense Agencies performing T&E work were not identified within the context of this revised statement. The Group agreed that all members should let the subgroup know of any Defense Agency, not represented in this Group, performing T&E work so they can recommend solutions for considering them.

The discussion then turned to determining how to consider impacts of evolving technologies. Some potential recommendations were addressed. The Group agreed to allow the subgroup to discuss and make recommendations as to how to handle this issue.

In a related discussion, the Group began addressing how to determine future workload within the T&E environment. After a lengthy discussion, the Group decided to have the subgroup provide recommendations for consideration.

Extensive discussion then began on the measures of merit and the use of TYPE 1-3 headings and RECOMMENDATION BANDS. Concern arose over the potential for predecisional interpretation. There was general disagreement between Group members on their use or validity. The Group decided to turn these issues back to the subgroup for rework and address at the next meeting.

The meeting adjourned at 1140 hrs.

Approved: Lee Frame
Co-Chairman

John Bolino
Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

February 22, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Acting Co-Chair
Mr. Irv Boyles, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Mr. Doug Nation, Air Force
Mr. Jere Brinkley, Air Force
Mr. Joe Dowden, Air Force
Lt Col George London, Air Force
Mr. John Gehrig, Army
LTC David Powell, Army
MAJ Essex Fowlks, Army
MAJ Jack Marriott, Army
Mr. Tom Roller, Army
Mr. Gerry Schiefer, Navy
CAPT Dave Rose, Navy
Mr. Tom Metz, Navy
Dr. Don Linger, OSD Defense Nuclear Agency
COL Michael Toole, BMDO
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Frank Lewis, OSD PA&E
Col Tom Baker, DISA
Ms. Jeanne Karstens, OSD Comptroller
Mr. Don Bortner, OSD Comptroller
Mr. David Vincent, OSD Inspector General

Resource Utilization Measurement System Update

to

OSD T&E Working Group on
Base Realignment and Closure
22 February, 1994

T.R. Metz
TERIB Secretariat

Background

This is an "information only" briefing

Background

12 March Recommendations to JCG(T&E)

* JCG(T&E) charter six member team

* Develop a modified RUMS to be briefed to the JCG(T&E) for approval

* Five trial MRTFB's continue collecting RUMS data throughout FY 1993

* Implement the modified RUMS across the entire MRTFB in FY 1994

BGEN Cranston brief: "Resource Utilization Measurement System"

Background

Tasking

* TERIB secretariat nominate 6 persons to form a RUMS team.

* Develop a RUMS with the specific purpose of *providing the JCG(T&E) and MRTFB managers with a management tool.*

* "RUM should identify long term over/under utilization *as a basis for strategic planning.*"

Team Members

* Mr. James Fisher: Army (TECOM)
* Mr. Thomas Roller: Army (TECOM)

* Mr. Howark Norfolk: Navy (NAWCAD)
  (replaced by Mr. Thomas Dobry)
* Mr. Richard Printy: Navy (NAWCWD)

* LCOL Ted King: Air Force (AFMC)
* Mr. Rick Hastings: Air Force (AFDTC)

* Mr. Thomas Metz: TERIB Secretariat

Team Progress

Definitions and Parameters:

Definitions

- Time
- Resource
- Capacity,
  - unconstrained
  - budgeted
  - surge
- User Time
- Overtime
- Non Availability

Parameters

- Use Efficiency
- Utilization
- Surge Capacity
- Surge

Team Progress

DEFINITIONS:

Time: A measure in resource (facility) clock hours, allowing for simultaneous (multiple) testing within a facility or upon a range. *If user test hours are defined in multiples (i.e.: more than one test hour per clock hour) then capacity must be defined in multiple hours of capacity per test hour.*

Resource: A facility along with the associated equipments, including air/land/sea space, needed to conduct a T&E operation. *Capacity is based upon present equipment, and instrumentation packages in place.*

Capacity, Unconstrained: A measure of the maximum time the resource could be used under *unconstrained personnel conditions.*

Team Progress

DEFINITIONS (con't):

Capacity, Budgeted: **A measure of the maximum time the resource is staffed under present normal personnel conditions, including the use of contractor personnel.** ***Budgeted capacity excludes resource overtime.***

Capacity, Surge: **Unconstrained capacity minus budgeted capacity.**

User Time: **The measure of the use of a resource paid for by a customer** ***(includes set up and take down times only if they preclude use of the resource by another customer).***

Team Progress

DEFINITIONS (con't):

Overtime: A measure of the use of a resource by a paying customer in excess of the normal resource budgeted capacity *(Measured in resource hours used, not in labor hours expended).*

Non Availability: The measure of resource availability precluded for customer use due to *external* constraints (e.g. customer cancellation, maintenance, weather, etc.).

Team Progress

PARAMETERS:

Use Efficiency: A measure of the percent of time a resource is *available* for customer use.

$$\text{Use Efficiency} = \frac{\text{Budgeted Capacity} - \text{Non Availability}}{\text{Budgeted Capacity}}$$

Team Progress

PARAMETERS:

Utilization: **A measure of resource use against budgeted capacity *plus overtime*.**

$$\text{Utilization} = \frac{\text{User Time}}{\text{Budgeted Capacity} + \text{Overtime}}$$

Team Progress

PARAMETERS:

Surge Capacity: **A measure of the maximum capacity potential of a facility given an *unconstrained* budget and personnel environment (*without additional infrastructure investment).***

Surge Capacity = Unconstrained Capacity - Budgeted Capacity

Team Progress

PARAMETERS:

Surge: A measure of the percent of maximum capacity *potentially available* for customer use.

$$\text{Surge} = \frac{\text{Unconstrained Capacity} - \text{Budgeted Capacity}}{\text{Unconstrained Capacity}}$$

Team Progress

12 March Recommendations to JCG(T&E)

* JCG(T&E) charter six member team

* Five trial MRTFB's continue collecting RUMS data throughout FY 1993

* Develop a modified RUMS to be briefed to the JCG(T&E) for approval:

* *Implement the modified RUMS across the entire MRTFB in FY 1994*

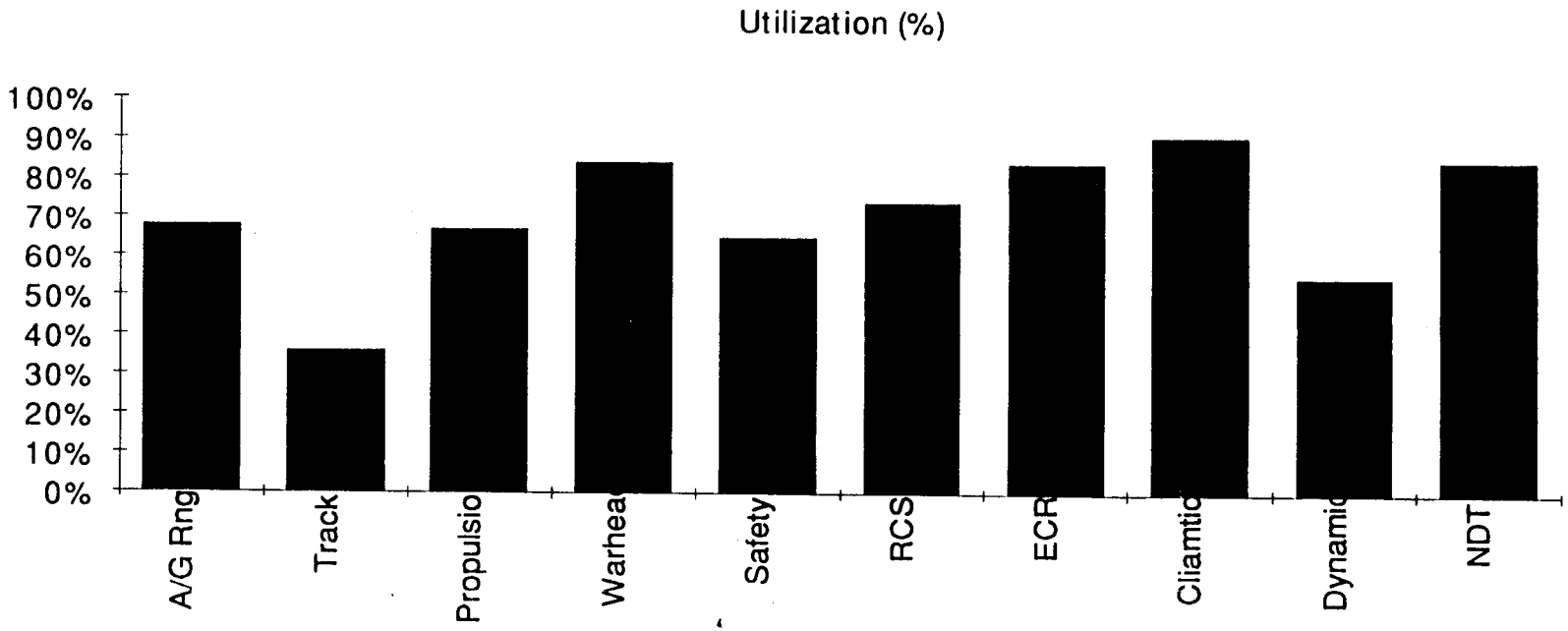
Team Future Actions

<u>July 21/22 Meeting @ Patuxent River:</u>**

- * Finalize Resource Measurement Definitions
- * Recommend Resource Use/Utilization Parameters
- * Recommend Date Collect/Report Methodology
  - - Data Collection Time Frames
  - - Data Reporting Requirements
  - - Data Formats
  - - Data Reporting Authority
- * Develop Final Recommendations to BoOD
- * Prepare Final RUMS Report

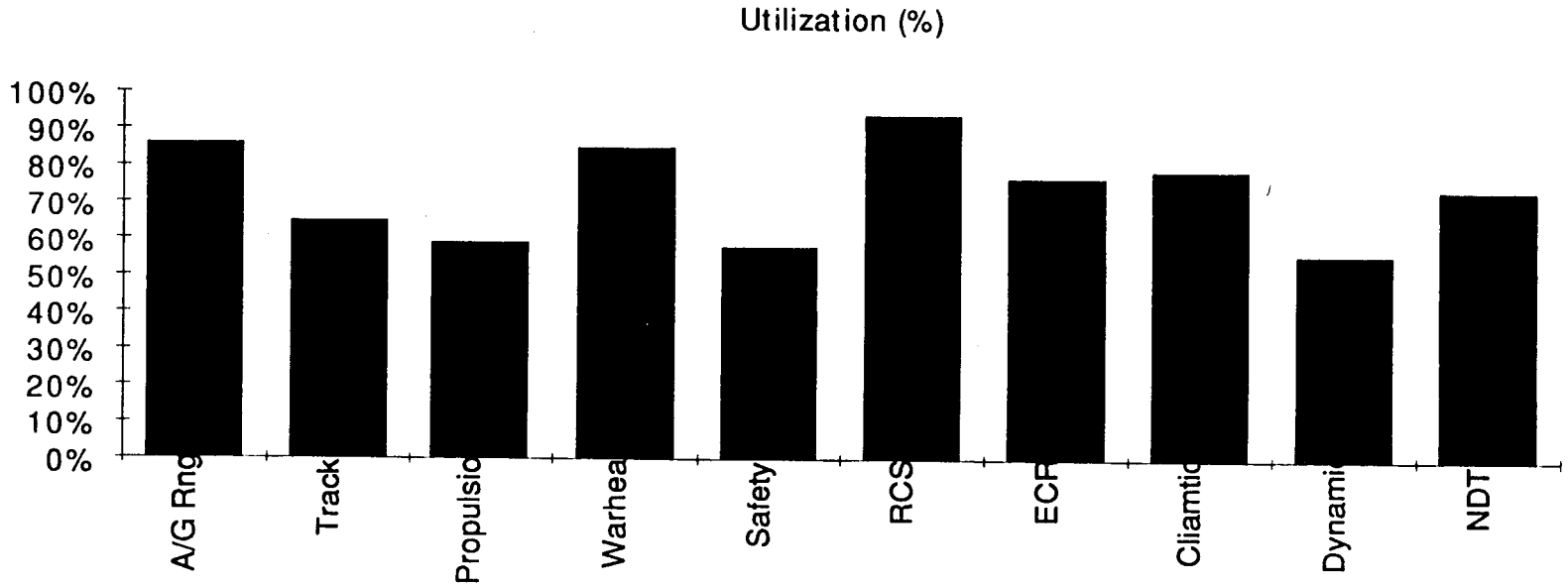
** Date changed to Aug 24/25

Example FY92 Data Display



Capacity (hrs)	A/G Rnge	Track	Propulsion	Warhead	Safety	RCS	ECR	Cliamtic	Dynamic	NDT
Surge (hrs)	7,000	1,000	3,000	9,000	2,000	1,000	1,000	0	8,000	8,000
Budgeted (hrs)	8,000	2,000	6,000	6,000	4,000	3,000	2,000	8,000	4,000	4,000
User Time (hrs)	6,119	722	4,063	5,087	2,580	2,667	1,880	7,288	2,588	3,569
Overtime (hrs)	979		100	64	65	589	250	0	713	183
Utilization (%)	68%	36%	67%	84%	65%	74%	84%	91%	55%	85%

Example FY93 Data Display



Capacity (hrs)	A/G Rnge	Track	Propulsion	Warhead	Safety	RCS	ECR	Cliamtic	Dynamic	NDT
Surge (hrs)	7,000	1,000	3,000	9,000	2,000	1,000	1,000	0	8,000	8,000
Budgeted (hrs)	8,000	2,000	6,000	6,000	4,000	3,000	2,000	8,000	4,000	4,000
User Time (hrs)	7,725	1,314	3,693	5,199	2,370	3,843	1,799	6,338	2,687	3,236
Overtime (hrs)	1,034	37	216	127	65	1,100	330	0	811	395
Utilization (%)	86%	65%	59%	85%	58%	94%	77%	79%	56%	74%

T&E JOINT CROSS-SERVICE GROUP

STATUS OF ACTIONS

February 22, 1994

SPECIAL ACTION SUBGROUP
Irv Boyles
DT&E/TFR

OVERVIEW

- Review for Acceptance
  - Group objective and products
  - Process
  - Standards
  - Assumptions
  - Guidance
  - Measures of Merit
  - Taxonomy

Request for Concurrence
Next Actions

OVERVIEW
SPECIAL ACTION SUBGROUP

Met 16 and 18 Feb 1994, 1C370 Conf. Room

Tasks:

- •• Groundrules
- •• Standards
- •• Products
- •• Assumptions
- •• Guidance
- •• Measures of Merit and Macro Data Elements
- •• Taxonomy

STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

DETERMINE OPPORTUNITIES FOR THE SERVICES AND DEFENSE AGENCIES TO CLOSE, REALIGN, OR CONSOLIDATE FACILITIES/CAPABILITIES THAT PERFORM TEST OR EVALUATION FUNCTIONS. THIS WILL BE ACCOMPLISHED BY IDENTIFYING ALTERNATIVES IN THE SERVICES AND DEFENSE AGENCIES, OTHER GOVERNMENT AGENCIES, OR IN INDUSTRY.

PRODUCTS OF T&E JOINT CROSS-SERVICE GROUP

Recommendations as Alternatives to Services and Defense Agencies to Include:

A list of all DoD test and evaluation facilities/capabilities identified by Recommendation Band as to their potential for closure, realignment, or consolidation (coordinated with Labs and Depot Maintenance Groups).

A list of all (DoD and non-DoD) test and evaluation facilities/capabilities projected to have excess capacity or be under-utilized that are determined capable of absorbing other workload. Some investment could be needed.

A list of DoD installations that could accommodate, with reinvestment, relocation of current test or evaluation facilities/capabilities .

A list of outsourcing opportunities determined feasible.

REMINDER: T&E Joint Cross-Service provides oversight, analysis performed by the Services and Defense Agencies

SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
Apr-Jul		Collect data
1 Aug-30 Sep		Analyze data and submit results to T&E Group
Oct	Review results for cross-Service opportunities	
4 Nov	Issue recommendations and targets	
Nov-Dec		Factor recommendations into each Component's BRAC process
1 Jan		Submit Component BRAC Reports
Jan 95	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

February 18, 1994

STANDARDS

- All services and defense agencies are to collect the same data elements, use same definitions as required by the T&E Joint Cross-Service Group, and coordinated with other joint cross-Service groups.

- "Test facilities/capabilities" refers to DoD-owned support facilities or capabilities available to collect and produce data under specified conditions as required by developmental or operational test program, mission, or project; maintenance verification; experiment; live fire; tactics development; shelf life; production testing; foreign comparative testing; or foreign material exploitation and sales.

- "Evaluation facilities/capabilities" refers to DoD-owned activities that plan data requirements and analysis approaches; review, analyze, and synthesize data collected from various sources (including testing); and assess or evaluate performance, effectiveness, suitability and programmatic risks.

ASSUMPTIONS

Workload for test and evaluation facilities and capabilities is primarily a function of the RDT&E budget line, which is expected to decline by 15% by 1999. T&E workload is not a direct function of force structure. (NOTE: To be verified).

At least one test facility/capability will be required to address any technology in use or nearing maturation. Geographic assets must be adequate.

Closure or realignments of laboratories, maintenance depots, and training activities could necessitate consolidation with test facilities/capabilities.

Evaluation of developing technologies and systems will follow a process that involves a progression of test facilities/capabilities ranging from modeling and simulation, component measurement, through hardware-in-the-loop, system integration laboratories, installed-system, to open air/field.

ASSUMPTIONS (CONT.)

Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide DIS internetting capability are programmed.

Facilities/capabilities used for pure research that do not have production potential for throughput, or that are expected to continue throughout the FYDP to be "research" themselves (eg, calibrations or procedures questionable), should not be considered elgible to absorb T&E workload.

Data will not be collected on classified test facilities/capabilities - Senior leadership of the T&E Joint Cross-Service Group will factor in considerations as appropriate.

GUIDANCE TO SERVICES DATA COLLECTION

- Use T&E facility/capability guidance definition (attached)
- Include funded investments for new facilities/capabilities through FY95
- Include improvements/upgrades in Service or Defense Agency ~~POMs.~~ FY 95 FYDP
- Use definitions for "capacity" and "utilization" (attached)

GUIDANCE FOR QUALIFYING AS A TEST AND EVALUATION FACILITY/CAPABILITY

The smallest identifiable work entity consisting of a set of DoD-owned or controlled real property, air/land/sea/space, or any collection of equipment, platforms, ADPE and instrumentation that can conduct a T&E operation and provide a deliverable test or evaluation product for any one of the following functions: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed system, open air range, or test mission support. It will typically consist of all of the following components: data collection sensors and instrumentation, data reception and storage, data processing, and data display and reporting. Can support test or evaluation of components through systems, platforms, or missions in the following categories: air, land, naval, space, C4I, munitions, electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, directed energy, guidance, and materiels.

Includes all funding sources (RDT&E, procurement, O&M, training,etc).

EXAMPLES - T&E FACILITIES

A T&E FACILITY	NOT A T&E FACILITY
AEDC Engine Test Facility J-6 with computation	J-6 Computational Facility
WSMR Small Missile Range (SMR) (WSMR)	White Sands Missile Range
Guided Weapons Evaluation Facility (GWEF)	Photo-theodolites
AEDC Wind Tunnel 16T	Model shop
AFFTC Ridley Mission Control Center with any specific range	Instrumentation Radar Site
OEC of OPTEC, Alexandria	MPS-36, FPS-16, MOTR
G-4 Track, China Lake	13,500 ft Runway
ACMI System	ACMI Pods, Debriefing
DPG Physical Test Facility	Vibration Test Chambers

NAWC Mojave B Combat Range

Munson Vehicle Track

Test aircraft/testbed with maint facilities

Individual Targets/Simulators

Instrumentation cameras

F-16 test aircraft

GUIDANCE TO SERVICES
DATA ANALYSIS

- Use 1994 FYDP as baseline to calculate costs and savings
- Closure/realignment opportunities addressed at facility level
- Retain essential technical capabilities for core competencies/technologies
- Forecasted workload can be used to the degree it can withstand audit.
- Identify impacts of single node failure
- Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing
- Consider retention of difficult-to-replace essential geographic assets (e.g., airspace, ground/terrain, climates, sea, ports) without regard to "ownership"
- Recognize adaptability to future technologies
- Environmental cleanup costs/difficulties are not to be considered for closure or downsizing a facility/capability
- Address synergies of co-locating functions such as test, lab, training, maintenance and program offices

MEASURES OF MERIT
(T&E JOINT CROSS SERVICE GROUP)

Potential Sending Installations (TYPE 1)

Identification of test or evaluation facilities/capabilities that can be closed, realigned, or consolidated elsewhere (identified in recommendation bands).

Potential Receiving Installations (TYPE 2)

Identification of installation that can absorb test or evaluation workload (existing facility/capability).

Identification of installations that can accommodate relocation of a test or evaluation facility/capability (new facility/capability).

Potential Outsourcing Options (TYPE 3)

Identification of test or evaluation facilities/capabilities outside of DoD that could absorb workload (existing).

Identification of alternatives to having an in-house DoD facility/capability for test or evaluation.

MEASURES OF MERIT
SENDING INSTALLATION (TYPE 1)

Measures for identification of T&E facilities/capabilities that can be closed, realigned, or consolidated elsewhere (identified in recommendation bands).

Measures of Merit: **Type of Facility by Installation, Taxonomy, and Function**
Current Utilization
Condition

Type of Facility/Capability
Description by "Recommendation Band"
Description by Reliance taxonomy category
Description by function category

FORMAT FOR LIST OF T&E FACILITIES

Facility/Capability Title

Installation (MILITARY BASE)

Location (City and State)

Taxonomy Categories

Predominant Function Category (Hardware-in-the-loop, open air range, etc)

Recommendation (Band 1-6)

Cross-Service Utilization (Yes or No)

Cross-Service Potential (Yes or No)

T&E FACILITIES AND INSTALLATIONS

- **To categorize the T&E facilities and installations, analysis by the Services or Defense Agencies will be conducted to place them in one of six bands.**

- **The six bands are:**

  Band 1 - Minimum Core Installations. This band will be used to identify test facilities/capabilities (includes ranges) located at installations that manage the minimum core of DoD-owned or controlled test areas necessary to provide the required airspace, landspace, and seaspace to conduct realistic testing with sufficient safety footprints, security, terrain and climatic features, and environmental protection.

  Band 2 - Immovable Test Facilities. The band includes test facilities or ranges at DoD installations that are essential to the conduct of DoD test mission and not duplicated elsewhere, and it is impractical or cost prohibitive to relocate the function elsewhere.

T&E FACILITIES AND INSTALLATIONS (Cont.)

Band 3 - Testing Installations. Band 3 will include test facilities or ranges at installations with DoD airspace, landspace, or seaspace that could be moved or consolidated to a core installation, but the installation should be preyserved for training, surge, or other military application.

Band 4 - Additional Testing Installations. Band 4 includes test facilities and ranges at installations that should be retained to provide additional capacity to meet high priority DoD testing requirements, but are not critical during this period of drawdown.

Band 5 - Movable Test Facilities. Band 5 includes test facilities or ranges at an installation, but that location is not critical to the conduct of the test mission and the test facilities can be relocated or closed.

Band 6 - DoD-owned non-Based Facilities. This band includes facilities that belong to the DoD, but are not located on a DoD-installation. Facilities in this band will be further sub-categorized using the definitions shown for Bands 1 through 5.

MEASURES OF MERIT
SENDING INSTALLATION (TYPE 1)
(CONT)

Current Utilization

Projected Workload - Total test hours projected for current and future years through ~~1999~~ 2001

Historical Capacity - Total test hours used since 1986

Test Facility Utilization/Capacity - Current capacity

Condition

Age

Last upgrade

MEASURES OF MERIT
POTENTIAL RECEIVING INSTALLATIONS
(TYPE 2)

Identification of installations that can <u>absorb</u> test or evaluation <u>workload</u> (existing facility/capability).

<u>Measure of Merit</u>: Current Utilization
Condition

<u>Current Utilization</u>

Projected Workload - Total test hours projected for current and future years through 1999

Historical Capacity - Total test hours used since 1986

Test Facility Utilization/Capacity - Current capacity

<u>Condition</u>

Age

Last upgrade

MEASURES OF MERIT
POTENTIAL RECEIVING INSTALLATIONS
(TYPE 2)
(Cont.)

Identification of installations that can <u>accommodate</u> relocation of a test or evaluation <u>facility/capability</u> (new facility/capability).

<u>Measures of Merit</u>: Ability to Accept New Facility/Capability
Synergy of Co-locating Various Functions

<u>Ability to Accept New Facility/Capability</u>

Total landspace, airspace, and seaspace available for expansion - Acres and sq miles (Within the facility or installation and outside of the facility or installation)

Expandability - Building sq footage, utilities, communications, etc. for new activities

Environmental Carrying Capacity - Ability to expand considering environmental and encroachment factors

<u>Synergy of Co-locating Various Functions</u>

TBD

MEASURES OF MERIT FOR POTENTIAL OUTSOURCING OPTIONS (TYPE 3)

Identification of test or evaluation facilities/capabilities outside of DoD that could absorb workload (existing).

Measure of Merit: **Ability of non-DoD location to Accept Workload**

Current Utilization

Projected Workload - Total test hours projected for current and future years through 1999

Historical Capacity - Total test hours used since 1986

Test Facility Utilization/Capacity - Current capacity

Condition

Age

Last upgrade

MEASURES OF MERIT FOR POTENTIAL OUTSOURCING OPTIONS (TYPE 3 CONT)

Workload Abilities

Total landspace, airspace, and seaspace available for expansion - Acres and sq miles (Within the facility or installation and outside of the facility or installation)

Expandability - Building sq footage for new activities

Environmental Capacity - Ability to expand considering environmental factors

Current and Projected Encroachment - Population or air/sea traffic density

Infrastructure, Utilities - Ability to support expansion at test facility

Infrastructure, Communications Support - Ability to support expansion at test facility

Experience

TBD

MODIFIED RELIANCE TAXONOMY

T&E LIST

Weapon Systems
- Air Vehicles
  - Fixed Wing
  - Rotary Wing
  - Propulsion
  - Avionics
  - Crew Systems
- Land Vehicles
- Naval Systems
  - Ships
  - Submarines
  - Amphibious

Space Systems
- Launch/Orbit Transfer
- Satellites
- Reentry Vehicles

LAB LIST

Air Vehicles
- Fixed Wing
- Rotary Wing
- Propulsion
- Avionics
- Crew Systems

Land Vehicles

Naval Systems
- Ships
- Submarines
- Amphibious

Space Systems
- Launch/Orbit Transfer
- Satellites
- Reentry Vehicles

C4I Systems Communications Network Radio Links Distributed Processing Data Fusion Computer Science	C4I Systems Communications Network Radio Links Distributed Processing Data Fusion Computer Science
Directed Energy	

<u>Disciplines</u> Munitions	Weapons Missiles (Strategic) Directed Energy Conventional Air/Surface
Electronic Combat	Electronic Warfare RF Countermeasures ED/IR Countermeasures C3 Countermeasures Simulation ECCM
Nuclear Effects Chemical/Biological Propulsion (non Air Vehicle) Environmental Effects T&E Support Aircraft	Chemical/Biological

ADDITIONAL ITEMS ON LAB GROUP LIST

Training and Simulation Equipment
- Training Devices and Features
- Classroom Instruction
- Intelligent Computer-Aided Training

General Purpose Equipment (SE/STE)

Pervasive
- Materials
- Computer Science
- Electronic Devices
- Sensors
- Environmental Sciences
- Basic Research
- Chemical/Biological Research
- Human System Interface

TAPSTEM
- Manpower and Personnel
- Training Systems

ASBREM
- Combat Casualty Care
- Human Systems Technology
- Infectious Disease
- Ionizing Radiation
- Medical Biological Defense
- Medical Chemical Defense
- Medical Dentistry

Joint Engineering
- Civil Engineering
- Environmental Quality

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, February 28, 1994

Minutes

The seventh meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 1530, February 28, 1994. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The Group reviewed and approved the meeting minutes for the February 22 meeting.

The Group reviewed and approved the revised Statement of Objective.

Discussion ensued on Component analysis. There was some concern about who would be performing analysis of cross-Service alternatives. The Group received clarification on Service and Joint Cross-Service Group responsibilities highlighted in January 7, 1994, kickoff memorandum. This topic will also be addressed at the March 1, 1994, Steering Group meeting.

The Group then began discussion of the excess capacity analysis performed by the Services. There was concern that the results of the excess capacity analysis will be provided too late for the Group to develop optimal cross-Service alternatives, e.g. after Services develop their own alternatives. The Group agreed to urge each Service to review their individual timelines to determine if they can accelerate the excess capacity analysis and release the results to the Group as soon as it is completed and before individual Service alternatives are developed.

Discussion ensued on how to determine future demand for T&E workload. Attempts were made at projecting future workload from budgeted amounts. However, there isn't a separate T&E budget line and, while RDT&E funds are declining, T&E dollars may or may not decline proportionally, particularly in terms of the effect on a specific facility or base. The subgroup has noted this problem and will address this at one of their future meetings. It was suggested that the T&E Board of Directors may have an opinion on how future workload might be determined. The Group agreed that this suggestion should be looked into.

Discussion then ensued on how classified facilities will be handled within the BRAC process. The Group agreed that there was potential for some cross-Servicing and agreed to raise this as an issue to the Steering Group at the March 1 meeting.

The Group then reviewed, modified and approved the charts that will be used for briefing the Steering Group.

The meeting adjourned at 1700 hrs.

Approved: L H Frame
Lee Frame
Co-Chairman

J. V. Bolino
John Bolino
Acting Co-Chairman

Attachment

BRAC 95

Joint Cross-Service Group on Test & Evaluation

February 28, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Acting Co-Chair
Mr. Irv Boyles, Acting Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Carroll Jones, Air Force
Mr. Doug Nation, Air Force
Mr. Joe Dowden, Air Force
Lt Col George London, Air Force
Maj Dennis Piper, Air Force
Mr. Walt Hollis, Army
MAJ Jack Marriott, Army
MAJ Essex Fowlks, Army
Mr. Tom Roller, Army
CAPT Dave Rose, Navy
Mr. Tom Kennedy, OSD Defense Nuclear Agency
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Frank Lewis, OSD PA&E
Col Tom Baker, DISA
Ms. Jeanne Karstens, OSD Comptroller
MAJ Rob Pope, OSD DR&E
Mr. Ray Wagner, DACS-TE

T&E JOINT CROSS-SERVICE GROUP

STATUS OF ACTIONS

February 28, 1994

SPECIAL ACTION SUBGROUP
Irv Boyles
DT&E/TFR

OVERVIEW
SPECIAL ACTION SUBGROUP

Met 23 and 25 Feb 1994, 1C370 Conf. Room

Revisited
- Process
- Standards
- Products
- Assumptions
- Guidance
- Functional Areas having Cross-Service Potential Payoffs

OVERVIEW

- Review for Acceptance
  - Group objective and products
  - Process
  - Standards
  - Assumptions
  - Guidance
  - Measures of Merit
  - Taxonomy

Request for Concurrence
Next Actions

STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

DETERMINE OPPORTUNITIES FOR THE SERVICES AND DEFENSE AGENCIES TO CLOSE, REALIGN, OR CONSOLIDATE FACILITIES/CAPABILITIES THAT PERFORM TEST OR EVALUATION FUNCTIONS. THIS WILL BE ACCOMPLISHED BY IDENTIFYING ALTERNATIVES IN THE SERVICES AND DEFENSE AGENCIES, OTHER GOVERNMENT AGENCIES, OR IN INDUSTRY.

PRODUCTS OF T&E JOINT CROSS-SERVICE GROUP (FROM COMPONENT ANALYSES)

Alternatives to Services and Defense Agencies to Include:

A list of all DoD test and evaluation facilities/capabilities identified as to their potential for closure, realignment, or consolidation (coordinated with Labs and Depot Maintenance Groups).

A list of all (DoD and non-DoD) test and evaluation facilities/capabilities projected to have excess capacity or be under-utilized that are determined capable of absorbing other workload. Some Investment could be needed.

A list of DoD installations that could accommodate, with reinvestment, relocation of current test or evaluation facilities/capabilities.

Proposed facility closure/realignment scenarios.
~~relocation of current test or evaluation facilities/capabilities .~~

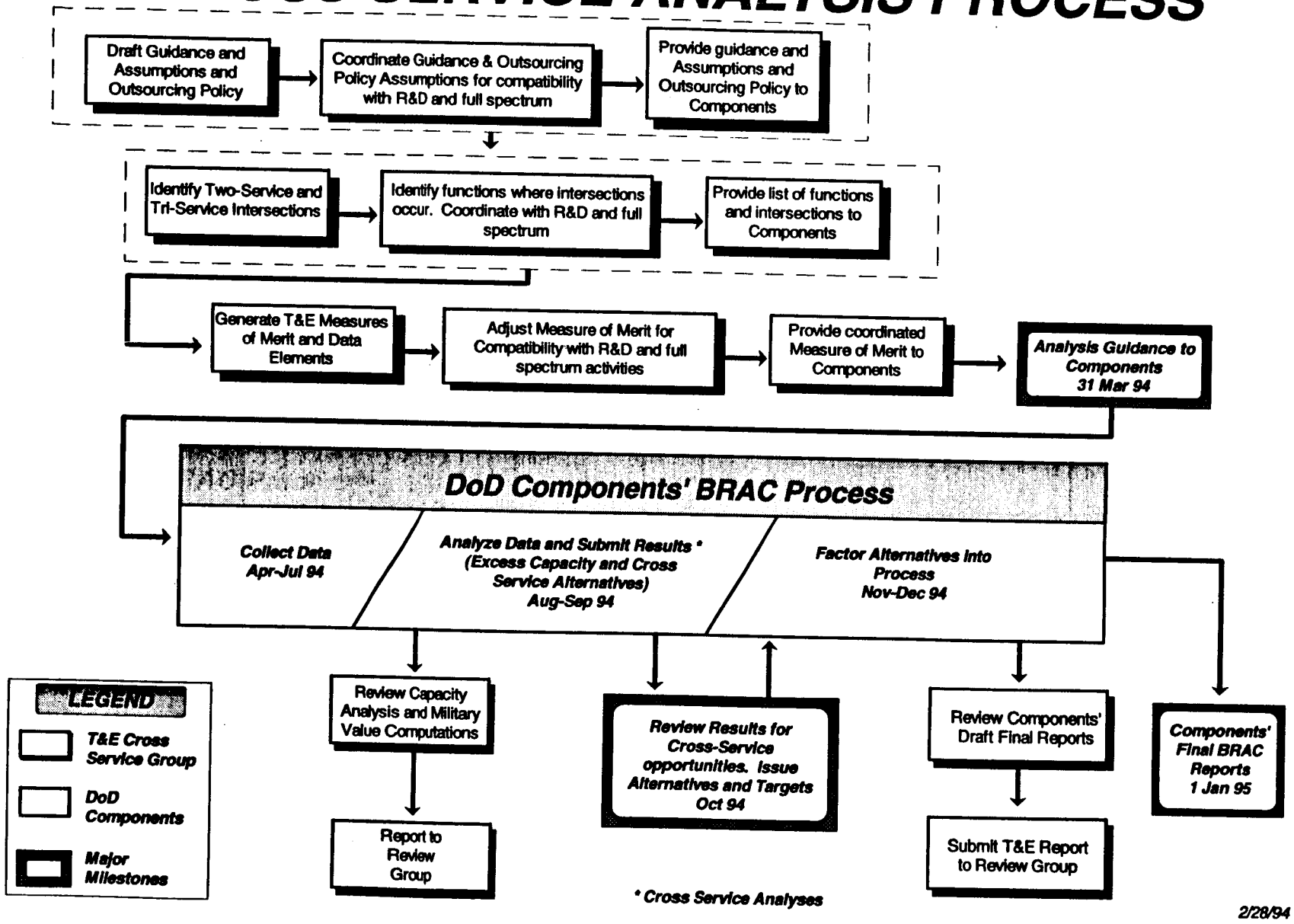
A list of outsourcing opportunities determined feasible.

SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
Apr-Jul		Collect data
1 Aug-Sep		Analyze data and submit results to T&E Group
Oct	Review results for cross-Service opportunities. Issue alternatives and targets.	
Nov-Dec		Factor alternatives into each Component's BRAC process
Jan 1995		Submit Component BRAC Reports
Jan-Feb	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

February 18, 1994

CROSS SERVICE ANALYSIS PROCESS



STANDARDS

- All services and defense agencies are to collect the same data elements, ~~• All services and defense agencies are to collect the same data elements using identical procedures~~, and using the same definitions as required by the T&E Joint Cross-Service Group, and coordinated with other joint cross-Service groups.

- ~~"Test facilities/capabilities" refers to DoD-owned support facilities or capabilities available to collect and produce data under specified conditions as required by developmental or operational test program, mission, or project; maintenance verification; experiment; live fire; tactics development; shelf life; production testing; foreign comparative testing; or foreign material exploitation and sales.~~

- ~~"Evaluation facilities/capabilities" refers to DoD-owned activities that plan data requirements and analysis approaches; review, analyze, and synthesize data collected from various sources (including testing); and assess or evaluate performance, effectiveness, suitability and programmatic risks.~~

STANDARDS

- All services and defense agencies are to collect the same data elements, and use the same definitions as required by the T&E Joint Cross-Service Group, and as coordinated with other joint cross-Service groups.

ASSUMPTIONS

Workload for test and evaluation facilities and capabilities expected to decline, by 26% between 1995 and 1999. ~~Workload for test and evaluation facilities and capabilities is primarily a function of the RDT&E budget line, which is expected to decline by 26% between 1995 and 1999 when adjusted for inflation.~~ T&E workload is not a direct function of force structure.

At least one test facility/capability will be required to address any technology in use or nearing maturation. Geographic assets must be adequate.

Closure or realignments of laboratories, maintenance depots, and training activities could necessitate consolidation with test facilities/capabilities.

Evaluation of developing technologies and systems will follow a process that involves a progression of test facilities/capabilities ranging from modeling and simulation, component measurement, through hardware-in-the-loop, system integration laboratories, installed-system, to open air/field.

ASSUMPTIONS (CONT.)

Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide internetting capability are programmed.

~~Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide DIS internetting capability are programmed.~~

~~Facilities/capabilities used for pure research that do not have production potential for throughput, or that are expected to continue throughout the FYDP to be "research" themselves (eg, calibrations or procedures questionable), should not be considered elgible to absorb T&E workload.~~

? Data will not be collected on classified test facilities/capabilities - Senior leadership of the T&E Joint Cross-Service Group will factor in considerations as appropriate.

will review

GUIDANCE TO SERVICES
DATA ANALYSIS

- Use 1995 FYDP as baseline to calculate costs and savings
- Address closure/realignment opportunities at facility level
- ~~Closure/realignment opportunities addressed at facility level~~
- Retain essential technical capabilities for core competencies/technologies
- Use data elements only to the degree that they can withstand audit.
- ~~Forecasted workload can be used to the degree it can withstand audit.~~
- Identify impacts of single node failure
- Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing
- Consider retention of difficult-to-replace essential geographic assets (e.g., airspace, ground/terrain, climates, sea, ports) without regard to "ownership"
- Recognize adaptability to future technologies
- Do not consider environmental cleanup costs/difficulties for closure or downsizing a facility/capability
- *{ Address synergies of co-locating functions such as test,*
- ~~*Environmental cleanup costs/difficulties are not to be considered for closure or downsizing a facility/capability*~~

GUIDANCE TO SERVICES
DATA ANALYSIS

- Use 1995 FYDP as baseline to calculate costs and savings
- Address closure/realignment opportunities at facility level
- Retain essential technical capabilities for core competencies/technologies
- Use data elements only to the degree that they can withstand audit.
- Identify impacts of single node failure
- Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing
- Consider retention of difficult-to-replace essential geographic assets (e.g., airspace, ground/terrain, climates, sea, ports) without regard to "ownership"
- Recognize adaptability to future technologies
- Do not consider environmental cleanup costs/difficulties for closure or downsizing a facility/capability
- *{ Address synergies of co-locating functions such as test, lab, training, maintenance and program offices}*

GUIDANCE TO SERVICES DATA COLLECTION

- Use T&E facility/capability guidance definition (attached)
- Include funded investments for new facilities/capabilities through FY95
- Include improvements/upgrades in Service or Defense Agency 1995 FYDP.
- Use definitions for "capacity" and "utilization" (to be specified per functional area)

GUIDANCE FOR QUALIFYING AS A TEST AND EVALUATION FACILITY/CAPABILITY

The smallest identifiable work entity consisting of a set of DoD-owned or controlled real property, air/land/sea/space, or any collection of equipment, platforms, ADPE and instrumentation that can conduct a T&E operation and provide a deliverable test or evaluation product for any one of the following functions: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed system, open air range, or test mission support. It will typically consist of all of the following components: data collection sensors and instrumentation, data reception and storage, data processing, and data display and reporting. Can support test or evaluation of components through systems, platforms, or missions in the following categories: air, land, naval, space, C4I, munitions, electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, directed energy, guidance, and materiels.

Includes all funding sources (RDT&E, procurement, O&M, training,etc).

T&E JOINT CROSS-SERVICE GROUP
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES

1. AIR VEHICLES

   - FIXED WING
   - ROTARY WING
   - PROPULSION
   - AVIONICS
   - CREW SYSTEMS
   - LIGHTER-THAN-AIR

2. SPACE SYSTEMS

   - LAUNCH/ORBIT TRANSFER
   - SATELLITES
   - RE-ENTRY VEHICLES

3. C^4I

   - COMMUNICATIONS NETWORK
   - RADIO LINKS
   - PROCESSING
   - DATA FUSION
   - FIRE CONTROL

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES (CONTINUED)

4. SENSOR SYSTEMS

   - RADARS
   - ELECTRO-OPTICAL/INFRARED/MILLIMETER WAVE/ ACOUSTIC/SEISMIC/ULTRAVIOLET

5. MUNITIONS (TERMINAL EFFECTS)

   - WARHEADS
   - FUZES
   - DISPOSAL

6. ELECTRONIC COMBAT

   - THREAT WARNING
   - RF COUNTERMEASURES
   - ED/IR COUNTERMEASURES
   - C3 COUNTERMEASURES
   - ECCM

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES (CONTINUED)

7. PROPULSION

- LARGE AIRCRAFT, AIR BREATHING
- SMALL AIRCRAFT, AIR BREATHING
- ROCKETS

8. WEAPONS

- ELECTRIC GUN
- DIRECTED ENERGY
- MISSILE SYSTEMS
- ARMAMENTS
- FIRE CONTROL
- MINES

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST SUPPORT CATEGORIES

1. NUCLEAR EFFECTS
   - ELECTROMAGNETIC PULSE
   - BLAST
   - THERMAL
   - INITIAL RADIATION

2. ENVIRONMENTAL EFFECTS
   - CLIMATIC
   - ELECTROMAGNETIC INTERFERENCE/COMPATIBILITY
   - QUALIFICATION
   - LIGHTNING

3. T&E SUPPORT AIRCRAFT

NEXT ACTIONS

Subgroup Meeting: 2 Mar 94, 0830 hrs, Rm 1C730

"T&E Facility" definition examples
Functional Area Definitions
Measures of Merit:
Work Data Elements

STET

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, March 8, 1994

Minutes

The eighth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900, March 8, 1994. Mr. Lee Frame and Mr. John Burt chaired the meeting. A list of attendees is attached.

Mr. John Burt was introduced as the new Co-Chair, replacing Mr. Adolph who recently left the Department of Defense.

The Group then reviewed and approved the previous meeting minutes.

The subgroup then briefed their status in defining categories and excess capacity. Discussion ensued on different methodologies that are being explored for identifying projected workload. The Group agreed with the thrust of the subgroup's work.

The Group then received an overview on the Steering Group meeting held on March 1, 1994. Information passed on related to FFRDC use, data sharing by the Services, and how classified facilities will be handled.

The Laboratory Joint Cross-Service Group representative provided an update of their progress. He related that some of the issues being wrestled with in their group are the same as this Group.

The Group then agreed on actions completed to date are: (all are attached)

a. Internal control plan (provided to Steering Group)
b. Outsourcing policy
c. Statement of Objective
d. Standards
e. Process with schedule
f. Cross-Service functional areas

The meeting adjourned at 1010 hrs.

Approved: Lee Frame
Co-Chairman

John Burt
Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

March 8, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Burt, Co-Chair
Mr. John Bolino, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Doug Nation, Air Force
Mr. Parker Horner, Air Force
Mr. Joe Dowden, Air Force
Col Rob Bongiovi, Air Force
Lt Col George London, Air Force
Mr. Jere Brinkley, Air Force
Mr. John Gehrig, Army
MAJ Jack Marriott, Army
MAJ Essex Fowlks, Army
Mr. Tom Roller, Army
Mr. Gerald Shiefer, Navy
CDR Mark Samuels, Navy
Mr. Tom Glenn, BMDO
Mr. Mark Flohr, OSD Defense Nuclear Agency
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. L.P. Filipkowski, DISA
Mr. Don Bortner, OSD Comptroller
MAJ Rob Pope, OSD DR&E
Mr. David Vincent, DoD IG

DRAFT -- February 28, 1994

SUBJECT: INTERNAL CONTROL PLAN (ICP) FOR MANAGEMENT OF BRAC 95 TEST AND EVALUATION (T&E) JOINT CROSS-SERVICE GROUP

REFERENCES: (a) Defense Base Closure and Realignment Act of 1990 (P.L. 101-510 as amended by P.L. 102-190)

(b) USD(A&T) Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 3, 1994

(c) DEPSECDEF Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 7, 1994

1. Purpose. This memorandum describes the management controls that will guide and regulate the DoD Test and Evaluation (T&E) Joint Cross-Service Group's actions to comply with the requirements of reference (a) and the direction contained in references (b) and (c).

2. Background. Part A, Title XXIX of Public Law 101-510, as amended by Public Law 102-190 and Public Law 103-160, establishes the exclusive procedures under which the Secretary of Defense may pursue realignment or closure of military installations inside the United States, with certain exceptions. The law established independent Defense Base Closure and Realignment Commissions to review the Secretary of Defense's recommendations in calendar years 1991, 1993, and 1995. Reference (c) establishes six Joint Cross-Service Groups, one of which is the Test and Evaluation (T&E) Joint Cross-Service Group (T&EG). Reference (c) also directs that the T&EG must develop and implement an internal control plan for base realignment, closure, or consolidation studies to ensure the accuracy of data collection and analyses.

3. Scope. This internal control plan includes:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

4. Internal Control Mechanisms. The objective of the internal control mechanisms employed by the T&EG is to ensure the accuracy and completeness of the information upon which the T&EG decisions and recommendations will be based. The two principal control mechanisms are organization and documentation.

a. Organizational Controls. There are two organizations which have primary responsibility for the T&E contribution to the BRAC 95 process: The T&E Joint Cross-Service Group (T&EG) itself and the secretariat to the T&EG that has been established by the T&EG Action Plan. The T&EG Secretariat (T&EGS) has been tasked to develop procedures and methods to maintain the records required by the T&EG. The DoD Inspector General (DoD IG) services as technical advisor to the T&EG and as the field auditor for data gathered in support of T&EG activities. The specific responsibilities of these organizations for ensuring internal control requirements are met are as follows:

(1) T&E Joint Cross-Service Group (T&EG). The T&EG is charged with developing analyses guidance and criteria for the use of the DoD Components while conducting cross-service analyses in the T&E area, and for providing oversight of these analyses and making recommendations to the USD(A&T). The T&EG is responsible for ensuring a fair and complete evaluation is made of the T&E facilities and installations in accordance with the provisions of reference (a). This includes overseeing the compilations of required data and information; and making decisions regarding analyses guidelines, standards, assumptions, measures of merit, data elements, excess capacity, military value, and other impacts.

(2) Secretariat for T&E Joint Cross-Service Group (T&EGS). The chairs of the T&E Joint Group have established from members of their own staffs, a secretariat for the group. The secretariat is led by the Deputy Director, Test Facilities and Resources, (D,T&E) in close coordination with the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Minutes of T&EG meetings. The minutes will be kept by the representative from the DASD (Economic Reinvestment and BRAC) and will not be circulated. Coordination by the co-chairs will be required as a minimum.

that information submitted to the Secretary of Defense and to the Defense Base Closure and Realignment Commission must be certified as accurate and complete to the best of the certifier's knowledge and belief. The procedures outlined in that reference will ensure the accuracy and completeness of the data and information contained in the TEFIDB.

(3) Record Keeping. Minutes will be prepared by the representative of DASD (ER&BRAC) of all formal T&EG meetings which are part of the decision-making process in arriving at recommendations for base closure and realignment to be forwarded to the Secretary of Defense. Decision papers will be prepared to memorialize each decision made by the Group and the justification for that decision. All documents or data files on magnetic media forwarded from other sources, generated for the BRAC 95 process, and used for analyses, and all other documents that relate to the BRAC 95 process will be maintained in a library with controlled access by the T&EGS.

(4) Oral Briefings. From time to time, the T&E Cross-Service Group will receive formal and informal briefings from persons both in and out of the Federal government. If the T&EG considers any such briefing presents relevant and useful information or data, before such information or data can be entered into the TEFIDB, the T&EG must either (i) require the presenter (if a DoD employee) to reduce such information or data to writing, or (ii) request the appropriate DoD organization to replicate such information or data. In both cases, certification required by the attachment applies.

(5) Technical Experts. Technical experts will be utilized to support both the development and/or refinement of T&EG analytical efforts and its deliberations. When the T&EG utilizes the input of a technical expert, the specific contribution, notes, analyses, or other correspondence developed in support of the BRAC 95 process will be made a part of the TEFIDB. When technical experts provide information or data that the T&EG considers relevant and appropriate for consideration during their deliberations, the experts shall be requested to submit the information/data in writing with the required certification, so that it may be included in the TEFIDB. Whenever either the T&EG or the T&EGS incorporates the contribution of technical experts into the TEFIDB, the entry will include a description of the qualifications for designating an individual as a technical expert. For any information/data that is derived from an authoritative sources (e.g., a Federal, state, or local government agency), the document which includes the certification shall identify the source and provide adequate justification for relying on the source.

- Descriptions of how base realignment and closure policies, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

(3) DoD Inspector General. Reference (c) states that the DoD Inspector General shall be available to assist the in developing, implementing, and evaluating internal control plans. The T&E Joint Cross-Service Group shall submit this internal control plan to the DoD IG for review and evaluation. If any data is collected directly as a result of the T&E Group's actions then the DoD IG will be requested to provide field audits that will review the supporting data and documentation used to develop the data that was submitted to the T&E Joint Cross-Service Group. The DoD IG will ensure audit standards are met and will advise the T&E Joint Group of any significant issues identified during the independent audit ass any such issues are identified.

b. Documentation Control. All significant events in the T&EG involvement in the BRAC 95 process will be promptly recorded and clearly documented to ensure the accuracy and completeness of the information used by the T&EG in performing evaluations of T&E facilities and installations. The following elements will be strictly adhered to:

(1) T&E Facility and Installation Data Base (TEFIDB). The TEFIDB will be the sole and authoritative data base for conducting cross-service analyses of T&E facilities and installations. The TEFIDB will contain all relevant data and information, pertaining to all T&E facilities and installations within the scope of the T&E Cross-Service Group. Specific procedures will be promulgated for development and maintenance of the TEFIDB. Elements included in the data base must have been certified in accordance with the attachment and will be subject to DoD IG source validity checks and data accuracy assessments.

(2) Certification. By the attached certification procedures, the Co-Chairs of the T&E Joint Cross-Service Group establish the policy implementing the requirements of the Act

(6) Access to Data. Access to the TEFIDB will be limited to those persons identified by the T&EG and the T&EGS. Access to the TEFIDB by non-government personnel will be determined by the T&EGS and will be for the sole purpose of completing and maintaining the data base. Analyses of data from the TEFIDB will not be conducted by non-government personnel. Subsets of the TEFIDB will be provided as required to the DoD Components in the course of their analyses. During the periods when the data is in the custody of a DoD Component, the BRAC 95 Internal Control Procedures of the Component shall apply.

5. Responsibilities. The T&EG, the T&EGS, and the DoD IG will execute their responsibilities consistent with the provisions of references (b) and (c).

6. Implementation. This Internal Control Plan is implemented immediately and will be updated as necessary to enhance the level of management control needed to achieve the desired results of the references.

Charles E. Adolph Director Test and Evaluation	Lee H. Frame Acting Director Operational Test and Evaluation

STATEMENT OF OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

The T&E Joint Cross-Service Group has been directed by the DEPSECDEF to "identify necessary outsourcing policies and make recommendations regarding those policies." This paper contains the material to meet this requirement.

Terminology:

Government Owned, Contractor Operated (GOCO). The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

Contracted Out. Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

Policy:

The policy concerning "outsourcing" for T&E facilities and bases is:

a. In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility or the base.

b. Outsourcing alternatives will include:

(1) Contracting-out the operation of the existing T&E facility,
(2) Converting the base to a GOCO, or
(3) Transferring the workload to another existing federal government or commercial test facility.

c. The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility.

There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

Outsourcing Goal:

In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector. Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Discussion:

While outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions, there is a limited application of this alternative to the T&E area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing. The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a Government-Owned, Government Operated (GOGO) facility.

There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only external source alternatives for most major T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA.

The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative. For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated.

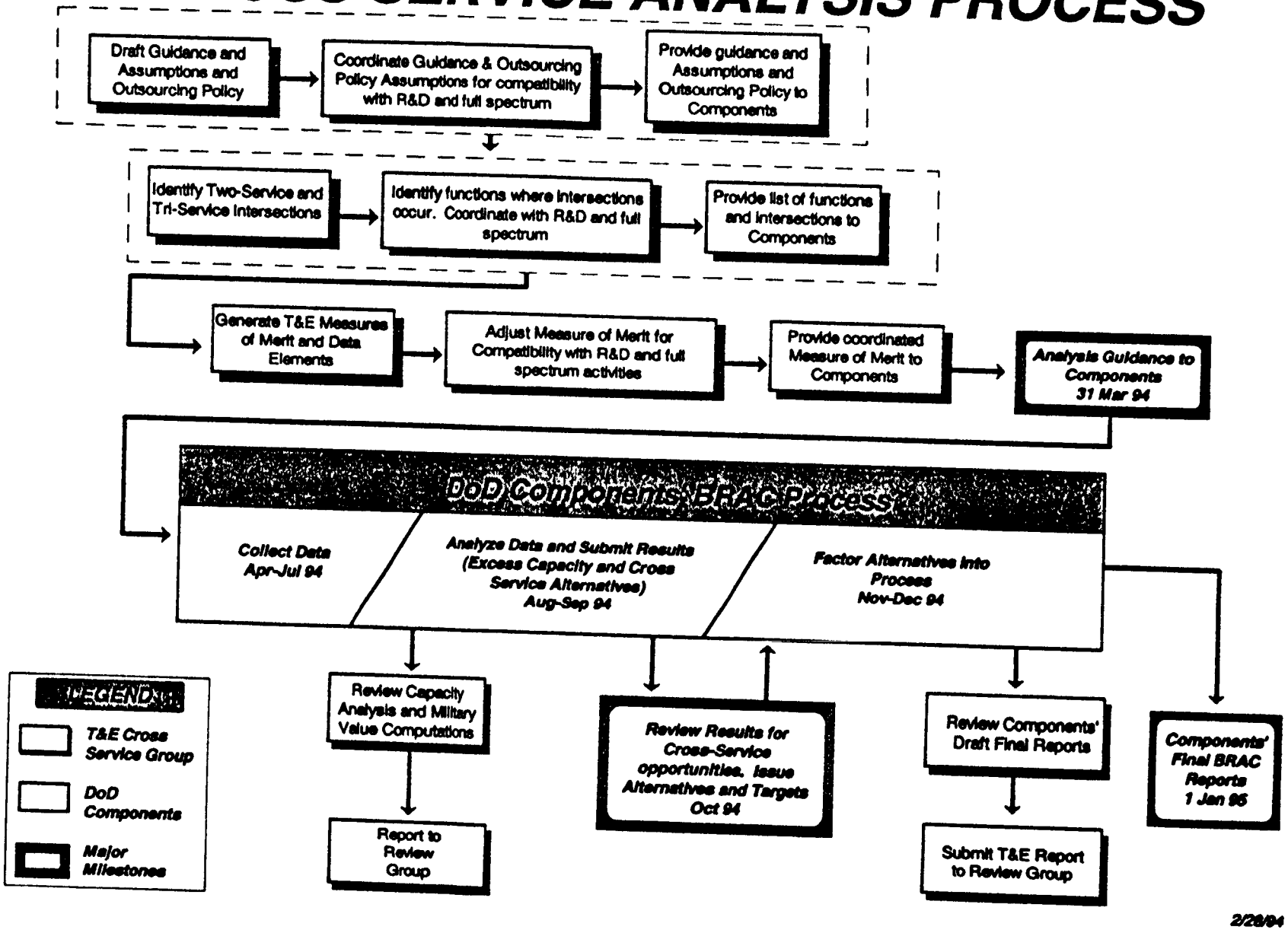
Specific Alternatives:

In addition to this policy statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

DETERMINE OPPORTUNITIES FOR THE SERVICES AND DEFENSE AGENCIES TO CLOSE, REALIGN, OR CONSOLIDATE FACILITIES/CAPABILITIES THAT PERFORM TEST OR EVALUATION FUNCTIONS. THIS WILL BE ACCOMPLISHED BY IDENTIFYING ALTERNATIVES IN THE SERVICES AND DEFENSE AGENCIES, OTHER GOVERNMENT AGENCIES, OR IN INDUSTRY.

CROSS SERVICE ANALYSIS PROCESS



SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
Apr-Jul		Collect data
1 Aug-Sep		Analyze data and submit results to T&E Group
Oct	Review results for cross-Service opportunities. Issue alternatives and targets.	
Nov-Dec		Factor alternatives into each Component's BRAC process
Jan 1995		Submit Component BRAC Reports
Jan-Feb	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

February 18, 1994

STANDARDS

- All services and defense agencies are to collect the same data elements, and use the same definitions as required by the T&E Joint Cross-Service Group, and as coordinated with other joint cross-Service groups.

CROSS-SERVICE FUNCTIONAL AREAS

- Air Vehicles
  - Fixed Wing
  - Rotary Wing
- Electronic Combat
- Armaments / Weapons
  - Directed Energy
  - Rocket / Missile / Bomb Systems
  - Air Armaments

T&E JOINT CROSS-SERVICE GROUP

PROGRESS OF ACTIONS

March 8, 1994

SPECIAL ACTION SUBGROUP
Irv Boyles
DT&E/TFR

T&E EXCESS CAPACITY DEFINITIONS

T&E EXCESS CAPACITY HAS TWO COMPONENTS:

THROUGHPUT EXCESS CAPACITY = UNCONSTRAINED CAPACITY MINUS PROJECTED WORKLOAD (in hours)

AND

PHYSICAL CAPACITY = A FUNCTION OF

- "MISSION ESSENTIALITY"
- LAND AND NATURAL RESOURCES
- CONTINGENCY, MOBILIZATION, & FUTURE REQUIREMENTS
- FUNCTIONAL SPECIFICS

WHERE:

UNCONSTRAINED CAPACITY = (24 HOURS - SCHEDULED DOWNTIME) X NUMBER OF SIMULTANEOUS MISSIONS POSSIBLE

PROJECTED WORKLOAD = TBD

COMMON MEASURES OF MERIT FOR ALL FUNCTIONS/FACILITIES

- CONDITION (Eg, age, last upgrade)
- TAXONOMY AREAS (Eg, Air Vehicles, Nuclear Effects, EC)
- FUNCTIONAL TYPE (Eg, HITL, OAR, M&S)
- ENVIRONMENTAL CARRYING ~~UTILIZATION~~ CAPACITY
- PROJECTED WORKLOAD
- UNCONSTRAINED CAPACITY
- HISTORICAL ~~USERS~~ UTILIZATION (TYPES) (?)
- INTERCONNECTIVITY (?)

MEASURES OF MERIT - AIR VEHICLES

FIXED WING AND ROTARY WING

- INSTRUMENTATION
- AVAILABLE AIRSPACE
- AIRFIELD CHARACTERISTICS (Eg, elevation, visibility, runway length)
- TYPES OF TESTING
- DATA REDUCTION
- KNOWN LIMITATIONS (Eg, number of simultaneous aircraft, mission types)
- GEOGRAPHIC FEATURES (Eg, types of climate available)
- SPECIALIZED FEATURES (Eg, launch, jumps)

FIXED WING

- SUPERSONIC CORRIDORS (height, width, length)

MEASURES OF MERIT - ELECTRONIC COMBAT

THREAT WARNING, RF COUNTERMEASURES, EO/IR COUNTERMEASURES, AND ECCM

- THREATS REPRESENTED
- OPEN LOOP OR CLOSED LOOP
- MAXIMUM SIGNAL DENSITY
- GEOGRAPHIC DISPERSION
    - THREAT LAYDOWN
    - REPRESENTATIVE DISTANCES
- MOVABILITY OF THREATS

T&E JOINT CROSS-SERVICE GROUP STATUS

ACCOMPLISHED

- Internal Control Plan (provided to Steering Group Subgroup)
- Outsourcing Policy
- Statement of Objective
- Standards
- Process with Schedule
- Cross-Service Funtional Areas

IN PROGRESS

- Assumptions
- Guidance for Data Collection
- Guidance for Data Analysis
- Definitions of Functional Areas
- Figures of Merit per Functional Area
- Data Elements

DRAFT -- February 28, 1994

SUBJECT: INTERNAL CONTROL PLAN (ICP) FOR MANAGEMENT OF BRAC 95 TEST AND EVALUATION (T&E) JOINT CROSS-SERVICE GROUP

REFERENCES: (a) Defense Base Closure and Realignment Act of 1990 (P.L. 101-510 as amended by P.L. 102-190)

(b) USD(A&T) Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 3, 1994

(c) DEPSECDEF Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 7, 1994

1. Purpose. This memorandum describes the management controls that will guide and regulate the DoD Test and Evaluation (T&E) Joint Cross-Service Group's actions to comply with the requirements of reference (a) and the direction contained in references (b) and (c).

2. Background. Part A, Title XXIX of Public Law 101-510, as amended by Public Law 102-190 and Public Law 103-160, establishes the exclusive procedures under which the Secretary of Defense may pursue realignment or closure of military installations inside the United States, with certain exceptions. The law established independent Defense Base Closure and Realignment Commissions to review the Secretary of Defense's recommendations in calendar years 1991, 1993, and 1995. Reference (c) establishes six Joint Cross-Service Groups, one of which is the Test and Evaluation (T&E) Joint Cross-Service Group (T&EG). Reference (c) also directs that the T&EG must develop and implement an internal control plan for base realignment, closure, or consolidation studies to ensure the accuracy of data collection and analyses.

3. Scope. This internal control plan includes:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

4. Internal Control Mechanisms. The objective of the internal control mechanisms employed by the T&EG is to ensure the accuracy and completeness of the information upon which the T&EG decisions and recommendations will be based. The two principal control mechanisms are organization and documentation.

a. Organizational Controls. There are two organizations which have primary responsibility for the T&E contribution to the BRAC 95 process: The T&E Joint Cross-Service Group (T&EG) itself and the secretariat to the T&EG that has been established by the T&EG Action Plan. The T&EG Secretariat (T&EGS) has been tasked to develop procedures and methods to maintain the records required by the T&EG. The DoD Inspector General (DoD IG) services as technical advisor to the T&EG and as the field auditor for data gathered in support of T&EG activities. The specific responsibilities of these organizations for ensuring internal control requirements are met are as follows:

(1) T&E Joint Cross-Service Group (T&EG). The T&EG is charged with developing analyses guidance and criteria for the use of the DoD Components while conducting cross-service analyses in the T&E area, and for providing oversight of these analyses and making recommendations to the USD(A&T). The T&EG is responsible for ensuring a fair and complete evaluation is made of the T&E facilities and installations in accordance with the provisions of reference (a). This includes overseeing the compilations of required data and information; and making decisions regarding analyses guidelines, standards, assumptions, measures of merit, data elements, excess capacity, military value, and other impacts.

(2) Secretariat for T&E Joint Cross-Service Group (T&EGS). The chairs of the T&E Joint Group have established from members of their own staffs, a secretariat for the group. The secretariat is led by the Deputy Director, Test Facilities and Resources, (D,T&E) in close coordination with the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Minutes of T&EG meetings. The minutes will be kept by the representative from the DASD (Economic Reinvestment and BRAC) and will not be circulated. Coordination by the co-chairs will be required as a minimum.

- Descriptions of how base realignment and closure policies, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

(3) DoD Inspector General. Reference (c) states that the DoD Inspector General shall be available to assist the in developing, implementing, and evaluating internal control plans. The T&E Joint Cross-Service Group shall submit this internal control plan to the DoD IG for review and evaluation. If any data is collected directly as a result of the T&E Group's actions then the DoD IG will be requested to provide field audits that will review the supporting data and documentation used to develop the data that was submitted to the T&E Joint Cross-Service Group. The DoD IG will ensure audit standards are met and will advise the T&E Joint Group of any significant issues identified during the independent audit ass any such issues are identified.

b. Documentation Control. All significant events in the T&EG involvement in the BRAC 95 process will be promptly recorded and clearly documented to ensure the accuracy and completeness of the information used by the T&EG in performing evaluations of T&E facilities and installations. The following elements will be strictly adhered to:

(1) T&E Facility and Installation Data Base (TEFIDB). The TEFIDB will be the sole and authoritative data base for conducting cross-service analyses of T&E facilities and installations. The TEFIDB will contain all relevant data and information, pertaining to all T&E facilities and installations within the scope of the T&E Cross-Service Group. Specific procedures will be promulgated for development and maintenance of the TEFIDB. Elements included in the data base must have been certified in accordance with the attachment and will be subject to DoD IG source validity checks and data accuracy assessments.

(2) Certification. By the attached certification procedures, the Co-Chairs of the T&E Joint Cross-Service Group establish the policy implementing the requirements of the Act

that information submitted to the Secretary of Defense and to the Defense Base Closure and Realignment Commission must be certified as accurate and complete to the best of the certifier's knowledge and belief. The procedures outlined in that reference will ensure the accuracy and completeness of the data and information contained in the TEFIDB.

(3) Record Keeping. Minutes will be prepared by the representative of DASD (ER&BRAC) of all formal T&EG meetings which are part of the decision-making process in arriving at recommendations for base closure and realignment to be forwarded to the Secretary of Defense. Decision papers will be prepared to memorialize each decision made by the Group and the justification for that decision. All documents or data files on magnetic media forwarded from other sources, generated for the BRAC 95 process, and used for analyses, and all other documents that relate to the BRAC 95 process will be maintained in a library with controlled access by the T&EGS.

(4) Oral Briefings. From time to time, the T&E Cross-Service Group will receive formal and informal briefings from persons both in and out of the Federal government. If the T&EG considers any such briefing presents relevant and useful information or data, before such information or data can be entered into the TEFIDB, the T&EG must either (i) require the presenter (if a DoD employee) to reduce such information or data to writing, or (ii) request the appropriate DoD organization to replicate such information or data. In both cases, certification required by the attachment applies.

(5) Technical Experts. Technical experts will be utilized to support both the development and/or refinement of T&EG analytical efforts and its deliberations. When the T&EG utilizes the input of a technical expert, the specific contribution, notes, analyses, or other correspondence developed in support of the BRAC 95 process will be made a part of the TEFIDB. When technical experts provide information or data that the T&EG considers relevant and appropriate for consideration during their deliberations, the experts shall be requested to submit the information/data in writing with the required certification, so that it may be included in the TEFIDB. Whenever either the T&EG or the T&EGS incorporates the contribution of technical experts into the TEFIDB, the entry will include a description of the qualifications for designating an individual as a technical expert. For any information/data that is derived from an authoritative sources (e.g., a Federal, state, or local government agency), the document which includes the certification shall identify the source and provide adequate justification for relying on the source.

(6) Access to Data. Access to the TEFIDB will be limited to those persons identified by the T&EG and the T&EGS. Access to the TEFIDB by non-government personnel will be determined by the T&EGS and will be for the sole purpose of completing and maintaining the data base. Analyses of data from the TEFIDB will not be conducted by non-government personnel. Subsets of the TEFIDB will be provided as required to the DoD Components in the course of their analyses. During the periods when the data is in the custody of a DoD Component, the BRAC 95 Internal Control Procedures of the Component shall apply.

5. Responsibilities. The T&EG, the T&EGS, and the DoD IG will execute their responsibilities consistent with the provisions of references (b) and (c).

6. Implementation. This Internal Control Plan is implemented immediately and will be updated as necessary to enhance the level of management control needed to achieve the desired results of the references.

Charles E. Adolph Director Test and Evaluation	Lee H. Frame Acting Director Operational Test and Evaluation

STATEMENT OF OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

The T&E Joint Cross-Service Group has been directed by the DEPSECDEF to "identify necessary outsourcing policies and make recommendations regarding those policies." This paper contains the material to meet this requirement.

Terminology:

Government Owned, Contractor Operated (GOCO). The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

Contracted Out. Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

Policy:

The policy concerning "outsourcing" for T&E facilities and bases is:

a. In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility or the base.

b. Outsourcing alternatives will include:

(1) Contracting-out the operation of the existing T&E facility,
(2) Converting the base to a GOCO, or
(3) Transferring the workload to another existing federal government or commercial test facility.

c. The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility.

There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

Outsourcing Goal:

In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector. Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Discussion:

While outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions, there is a limited application of this alternative to the T&E area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing. The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a Government-Owned, Government Operated (GOGO) facility.

There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only external source alternatives for most major T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA.

The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative. For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated.

Specific Alternatives:

In addition to this policy statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

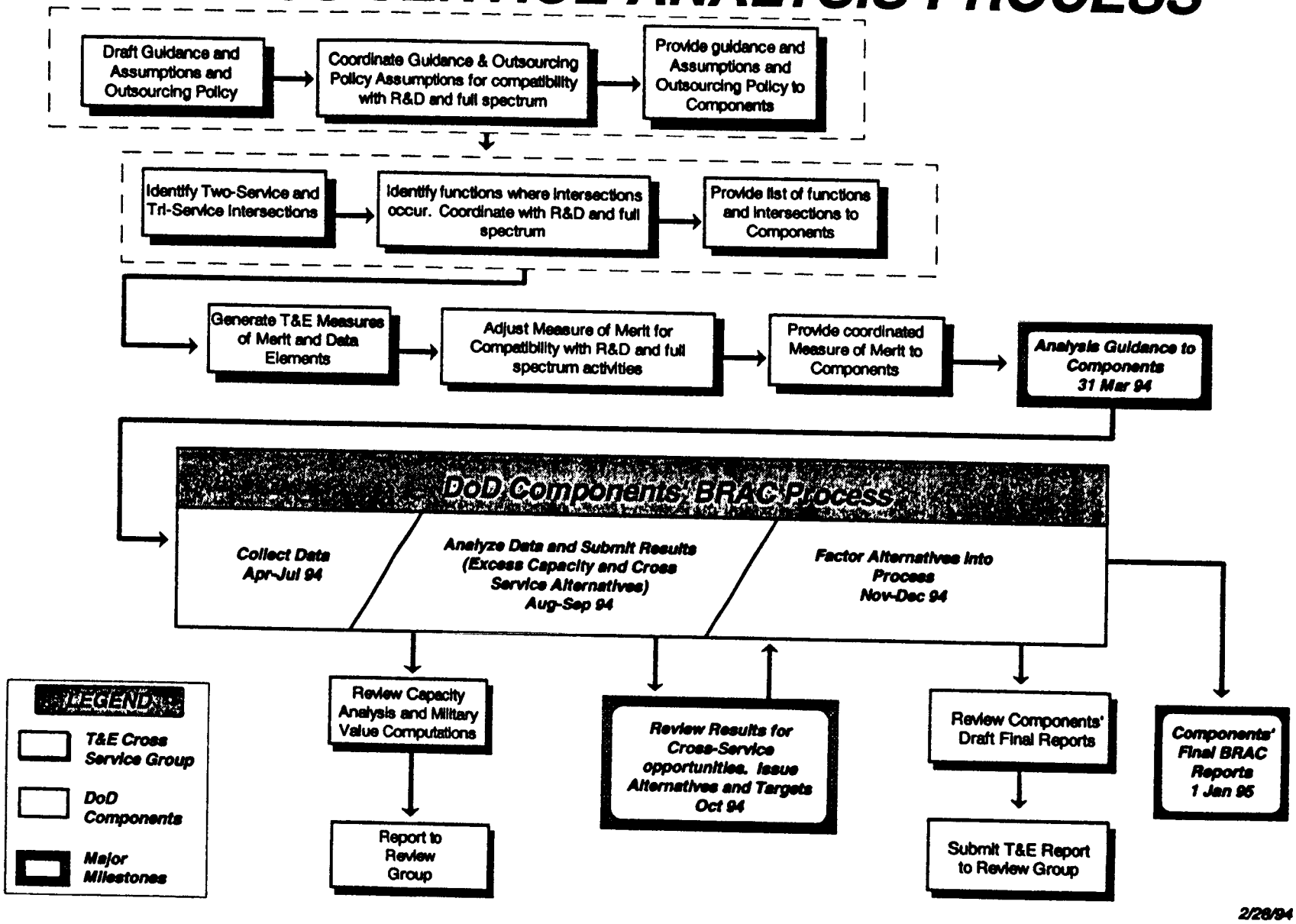
STATEMENT OF OBJECTIVE
T&E JOINT CROSS SERVICE GROUP

DETERMINE OPPORTUNITIES FOR THE SERVICES AND DEFENSE AGENCIES TO CLOSE, REALIGN, OR CONSOLIDATE FACILITIES/CAPABILITIES THAT PERFORM TEST OR EVALUATION FUNCTIONS. THIS WILL BE ACCOMPLISHED BY IDENTIFYING ALTERNATIVES IN THE SERVICES AND DEFENSE AGENCIES, OTHER GOVERNMENT AGENCIES, OR IN INDUSTRY.

STANDARDS

- All services and defense agencies are to collect the same data elements, and use the same definitions as required by the T&E Joint Cross-Service Group, and as coordinated with other joint cross-Service groups.

CROSS SERVICE ANALYSIS PROCESS



SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
Apr-Jul		Collect data
1 Aug-Sep		Analyze data and submit results to T&E Group
Oct	Review results for cross-Service opportunities. Issue alternatives and targets.	
Nov-Dec		Factor alternatives into each Component's BRAC process
Jan 1995		Submit Component BRAC Reports
Jan-Feb	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

February 18, 1994

T&E JOINT CROSS-SERVICE GROUP
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES

1. AIR VEHICLES

   - FIXED WING
   - ROTARY WING
   - PROPULSION
   - AVIONICS
   - CREW SYSTEMS
   - LIGHTER-THAN-AIR

2. SPACE SYSTEMS

   - LAUNCH/ORBIT TRANSFER
   - SATELLITES
   - RE-ENTRY VEHICLES

3. C^4I

   - COMMUNICATIONS NETWORK
   - RADIO LINKS
   - PROCESSING
   - DATA FUSION
   - FIRE CONTROL

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES (CONTINUED)

4. SENSOR SYSTEMS

   - RADARS
   - ELECTRO-OPTICAL/INFRARED/MILLIMETER WAVE/ ACOUSTIC/SEISMIC/ULTRAVIOLET

5. MUNITIONS (TERMINAL EFFECTS)

   - WARHEADS
   - FUZES
   - DISPOSAL

6. ELECTRONIC COMBAT

   - THREAT WARNING
   - RF COUNTERMEASURES
   - EO/IR COUNTERMEASURES
   - C3 COUNTERMEASURES
   - ECCM

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST CATEGORIES (CONTINUED)

7. PROPULSION

- LARGE AIRCRAFT, AIR BREATHING
- SMALL AIRCRAFT, AIR BREATHING
- ROCKETS

8. WEAPONS

- ELECTRIC GUN
- DIRECTED ENERGY
- MISSILE SYSTEMS
- ARMAMENTS
- FIRE CONTROL
- MINES

T&E JOINT CROSS-SERVICE GROUP (CONT)
CROSS-SERVICE FUNCTIONS

TEST SUPPORT CATEGORIES

1. NUCLEAR EFFECTS
   - ELECTROMAGNETIC PULSE
   - BLAST
   - THERMAL
   - INITIAL RADIATION

2. ENVIRONMENTAL EFFECTS
   - CLIMATIC
   - ELECTROMAGNETIC INTERFERENCE/COMPATIBILITY
   - QUALIFICATION
   - LIGHTNING

3. T&E SUPPORT AIRCRAFT

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, March 15, 1994

Minutes

The ninth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation was convened at 0900. Mr. Lee Frame and Mr. John Bolino chaired the meeting. A list of attendees is attached.

The Group reviewed and approved the meeting minutes from the last meeting on March 8, 1994.

The first item for discussion pertained to outsourcing. The chairman advised the Group that since no outsourcing policy could be established for T&E he would like to input this decision to the Steering Group at their next meeting scheduled for this afternoon. The Group agreed to this approach. The Group added that as a result of this decision, changes would need to be made to the Statement of Objective since it addresses outsourcing. The subgroup stated it would review all previously approved decisions and edit as necessary.

Discussion then ensued on a proposal to create a subgroup of the T&E Joint Cross-Service Group made up of members of Service BRAC offices and functional experts. This subgroup would identify a technical baseline for functions, identify a workload baseline for excess capacity analysis, and identify alternative for analysis. Some members disagreed with this approach because the identification of a technical baselines would predetermine the outcome of facilities. Other concerns that arose were how (methodology) the cross-service analysis would be done, and who from the Services would do the cross-service analysis. The Group was briefed that cross-service analysis was to be a main topic of the March 15 Steering Group meeting. The Group then tabled this discussion for later consideration.

The Group then reviewed the revised cross-service functional areas. A concern arose over the withdrawal of C^4I as a functional area from a previous draft. The Group determined not to include it because their was no appreciable infrastructure to make cross-service reductions.

The Group then received two briefings outlining different methodologies for projecting workload as part of the excess capacity calculation. Significant discussion ensued on whether projected workload should be based on historical budgeted data or on a formula that normalized future budget projections. An issue in this discussion was whether the Range Utilization Measurement System definition for capacity, which is currently defined in terms of unconstrained capacity, should be adjusted for a constrained capacity (i.e. one eight hour shift versus round the clock operations). The Group agreed to table this discussion and allow the subgroup to continue discussions and propose a resolution.

The last discussion focused on the Group's agreement to the proposed functional areas, measures of merit and approach to questions and data elements presented in the attached package. The Group did add that the slide pertaining to Products of T&E Joint Cross-Service Group is no longer valid since OSD guidance on format has been received.

The meeting adjourned at 1202 hrs.

Approved: L H Frame
Lee Frame
Co-Chairman

J. V. Bolino
John Bolino
Acting Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

March 15, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Bolino, Acting Co-Chair
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Dan Stewart, Air Force
Mr. Doug Nation, Air Force
Mr. Carroll Jones, Air Force
Mr. Parker Horner, Air Force
Mr. Joe Dowden, Air Force
Col Rob Bongiovi, Air Force
Lt Col George London, Air Force
Mr. Jere Brinkley, Air Force
Mr. John Gehrig, Army
MAJ Jack Marriott, Army
MAJ Essex Fowlks, Army
Mr. Tom Roller, Army
CAPT Dave Rose, Navy
Dr. Ron Nickel, Navy
Mr. Tom Glenn, BMDO
Mr. Mark Flohr, OSD Defense Nuclear Agency
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Irv Boyles, OSD T&E
Col Tom Baker, DISA
Ms. Jeanne Karstens, OSD Comptroller
Mr. Frank Lewis, OSD PA&E
MAJ Rob Pope, OSD DR&E
Mr. Ray Spencer, DoD IG

T&E JOINT CROSS-SERVICE GROUP STATUS OF ACTIONS

MARCH 15,1994

SPECIAL ACTION SUBGROUP

MAJ FOWLKS

TEMA

THE BRAC 95 T&E JOINT CROSS-SERVICE GROUP MEETING

0900 HRS TUESDAY, 15 MAR 1994

ROOM 1C730

AGENDA

- Opening Remarks
- Review Minutes
- T&E Sub-Group Update
  - Accomplished
    - » Cross-Service Functional Areas
    - » Measures of Merit
    - » Sample Questions (Data Elements)
  - In process

- Issues

THE BRAC 95 T&E JOINT CROSS-SERVICE GROUP MEETING

0900 HRS TUESDAY, 15 MAR 1994

ROOM 1C730

AGENDA

Report to BRAC 95 Steering Group (Appendix E)

Laboratory Group Update

Key Action Items:

- Measures of Merit completed
- Mar 15 - Finalize all documentation for BRAC 95 Steering Group Review
- Mar 25 - Finalize per Steering Group inputs

PURPOSE

- Provide information update to Cross-Service Group Principals.
- Obtain Cross-Service Group Principals' approval of Cross-Service Functional Areas, Measures of Merit, and approach to Questions / Data Elements.
- Obtain Cross-Service Group Guidance on Workload Projection, Excess Capacity / Utilization, and Services using same questions (Data Elements).

T&E SUB-GROUP UPDATE

ACCOMPLISHED:

- Internal Control Plan (provided to Steering Group Subgroup (Appendix A))
- Outsourcing Policy (Appendix B)
- Statement of Objective
- Standards
- Guidance for Qualifying as a Test and Evaluation Facility / Capability
- Assumptions
- Guidance for Data Collection
- Guidance for Data Analysis
- Process with Schedule
- Cross-Service Functional Areas (Appendix C)
- Measures of Merit
  - Overarching Measures of Merit
  - Test Categories Measures of Merit
- Sample questions (Data Elements (Appendix D))

T&E SUB-GROUP UPDATE

IN PROCESS:

- Methodology for Workload Projection
- Methodology for Excess Capacity and Utilization

STATEMENT OF OBJECTIVE
T&E JOINT CROSS-SERVICE GROUP

Determine opportunities for the services and defense agencies to close, realign or consolidate facilities / capabilities that perform test or evaluation functions. This will be accomplished by identifying alternatives in the Services and defense agencies, other government agencies, or in industry.

STANDARDS

All Services and defense agencies are to collect the same data elements and use the same definitions as required by the T&E Joint Cross-Service Group and as coordinated with other joint cross-service groups.

ASSUMPTIONS

- T&E workload is not a direct function of force structure.
- At least one test facility / capability will be required to address any technology in use or nearing maturation. Geographic assets must be adequate.
- Closure or realignments of laboratories, maintenance depots, and training activities could necessitate consolidation with test facilities / capabilities.
- Evaluation of developing technologies and systems will follow a process that involves a progression of test facilities / capabilities ranging from modeling and simulation, component measurement, through hardware-in-the-loop, system integration laboratories, installed-system, to open air / field.
- Potential for internetting facilities / capabilities can be considered in workload projections if investments to provide internetting capability are programmed.

GUIDANCE FOR QUALIFYING AS A TEST AND EVALUATION FACILITY / CAPABILITY

The smallest identifiable work entity consisting of a set of DoD-owned or controlled property (air / land / sea space) or any collection of equipment, platforms, ADPE or instrumentation that can conduct a test and evaluation (T&E) operation and provide a deliverable T&E product.

The T&E facility can support T&E of components through systems platforms or missions in the following categories: air, land, naval, space, C4I, munitions , electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, directed energy, guidance and materials.

The T&E operation can be any one of the following functions: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed systems, open air range, or test mission support. It will typically consist of all of the following components: data collection sensors and instrumentation, data reception and storage, data processing, and data display and reporting.

Includes all funding sources (RDT&E, procurement, O&M, training, etc.).

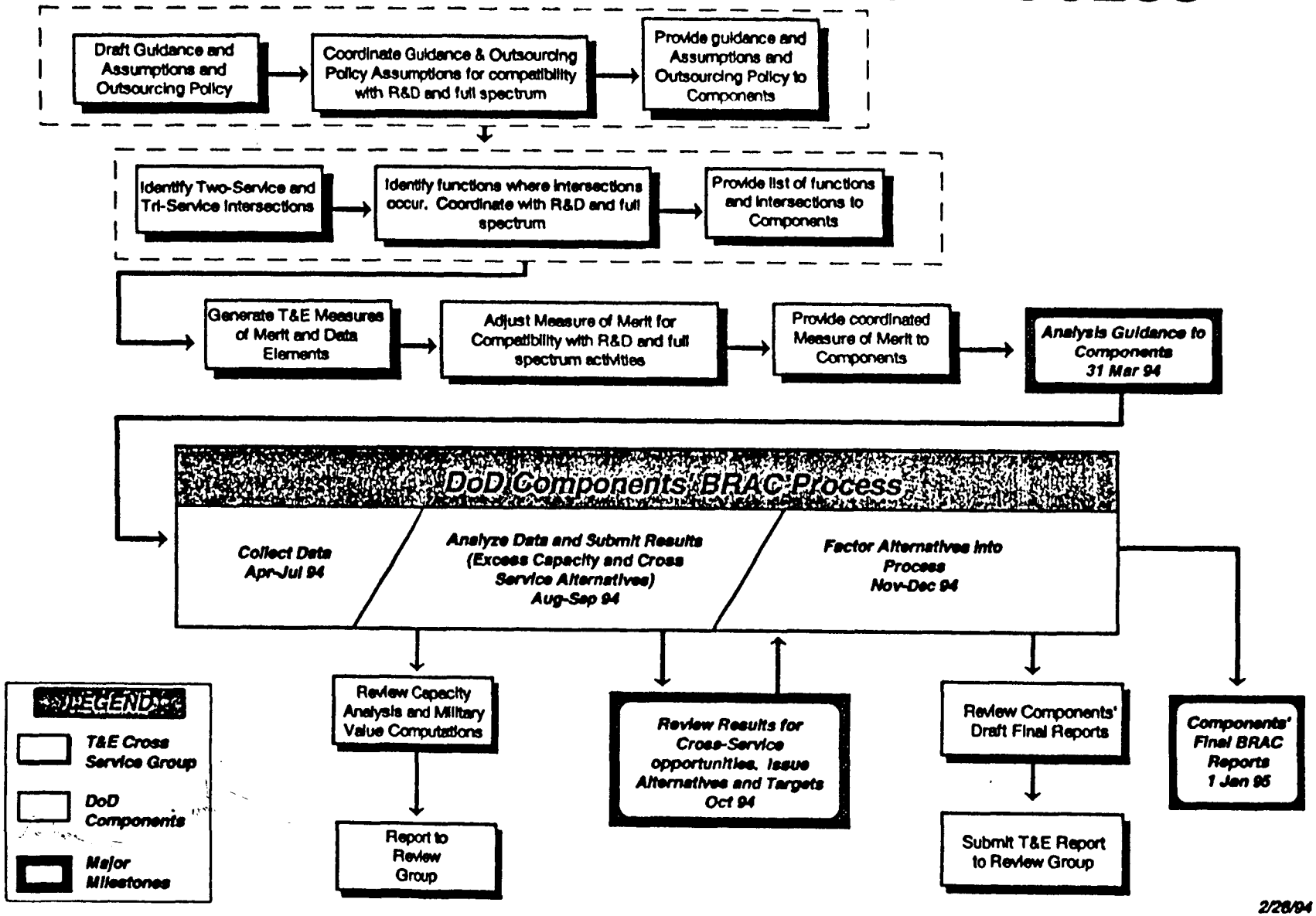
GUIDANCE TO SERVICES DATA COLLECTION

- Use T&E facility / capability guidance definition
- Include funded investments / upgrades in service or defense agency 1995 FYDP
- Use definitions for "capacity" and "utilization" (in process)

GUIDANCE TO SERVICES
DATA ANALYSIS

- Use 1995 FYDP as baseline to calculate costs and savings
- Address closure / realignment opportunities at facility level
- Retain essential technical capabilities for core competencies / technologies
- Use data element only to the degree they can withstand audit
- Identify impacts of single node failure
- Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing
- Consider retention of difficult-to-replace essential geographic assets (e.g. , airspace , ground/terrain, climates, sea, ports) without regard to "ownership"
- Recognize adaptability to future technologies
- Do not consider environmental cleanup costs / difficulties for closure or downsizing a facility / capability

CROSS SERVICE ANALYSIS PROCESS



PRODUCTS OF T&E JOINT CROSS-SERVICE GROUP

Alternatives to Services and Defense Agencies to Include:

- A list of all DoD test and evaluation facilities / capabilities identified as to their potential for closure, realignment, or consolidation (coordinated with Laboratory and Depot Maintenance Groups).
- A list of all (DoD and non-DoD) test and evaluation facilities / capabilities projected to have excess capacity or be under utilized that are determined capable of absorbing other workload. Investment could be needed.
- A list of DoD installations that could accommodate, with reinvestment, relocation of current test or evaluation facilities / capabilities.
- Proposed facility closure / realignment scenarios.
- A list of outsourcing opportunities determined feasible.

SUMMARY PROCESS
T&E JOINT CROSS-SERVICE GROUP

MILESTONES	T&E JOINT CROSS-SERVICE GROUP	DoD COMPONENTS
31 Mar	Issue guidance, assumptions, standards, measures of merit, data elements required	
Apr-Jul		Collect data
1 Aug-Sep		Analyze data and submit results to T&E Group
Oct	Review results for cross-Service opportunities. Issue alternatives and targets.	
Nov-Dec		Factor alternatives into each Component's BRAC process
Jan 1995		Submit Component BRAC Reports
Jan-Feb	Review Component BRAC Reports - Submit T&E Report to BRAC Review Group	

CROSS-SERVICE FUNCTIONAL AREAS

- Air Vehicles
  - Fixed Wing
  - Rotary Wing
- Electronic Combat
- Armaments / Weapons
  - Directed Energy
  - Rocket / Missile / Bomb Systems
  - Air Armaments

MEASURES OF MERIT

- Overarching Measures of Merit
- Test Categories Measures of Merit
  - Sample questions (Data Elements)

OVERARCHING MEASURES OF MERIT

- Who, what, where
- Categories and functions
- Workload (Workyears)
  - Historical
  - Forecasted
  - By types of testing
- Interconnectivity
- Condition (age, last upgrade)
- Capacity - unconstrained
- Environmental carrying capacity (including permits)
- Specialized test support facilities and targets
- Expandability
- Replacement cost
- Uniqueness
  - Support of other services / in-service missions
  - Other gov't / commercial

TEST CATEGORIES MEASURES OF MERIT
SAMPLE QUESTIONS (DATA ELEMENTS)

Air Vehicle -- Fixed Wing:

- Supersonic Airspace
  - » Do you have airspace within which you can conduct supersonic T&E operations?
  - » Provide the dimensions of that space. Upper and Lower altitudes, width, and length in nautical miles.
  - » Is it over water, or over land?
  - » How far is it from your runway?
  - » What restrictions must you observe to use this space? For example, must you account for inversion layer funnelling of the supersonic boom?
  - » What is the maximum number of aircraft that can use the space simultaneously?

ISSUES

- Workload Projection Methodology
- Excess Capacity / Utilization Methodology
- Services using same questions (Data Elements)

PROPOSED ARMY WORKLOAD PROJECTION METHODOLOGY
CUSTOMER BUDGET RATIO METHOD

A cross-service group will:

- Identify customer dollars for FY92, FY93, and in the FYDP.
- Convert the constant dollars and apply outlay rates provided by OSD Comptrollers.
- Sort into sub-groups by service, functional area, RDTE (less 6.1, 6.2), procurement, and FY.
- Average FY92 and FY93 for each sub-group to establish the baseline customer budget.
- Divide each sub-group in the FYDP by the baseline to establish the indices for each future year.
- Compute combined indices for each functional area by weighting RDT&E 65% and procurement 35%.
- Provide the indices to the Services for use in the data call.

PROPOSED ARMY WORKLOAD PROJECTION METHODOLOGY
CUSTOMER BUDGET RATIO METHOD (CONT)

The Services for each T&E facility will:

- Determine the workload baseline by averaging FY92 and FY93 workload by T&E functional area and non-T&E workload.
- Multiply the average workload for each T&E functional area by the index for that functional area.
- Adjust workload for each functional area based on site's detailed knowledge of T&E facility workload. Document basis/rationale for adjustment.
- Total the functional area workloads to get the total T&E workload for each facility.
- Add non-T&E workload as stable or justify large variations.

PROPOSED NAVY WORKLOAD PROJECTION METHODOLOGY

31-Mar-93

TECHNICAL CENTER CAPACITY ANALYSIS

Technical center	Budgeted Workyears FY-86	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	Maximum Workyear	Excess in Workyears
Research centers												
Naval Research Lab	3,983	4,069	4,143	4,100	4,228	4,271	4,268	3,976	3,949	3,946	4,271	
Total	**3,983**	**4,069**	**4,143**	**4,100**	**4,228**	**4,271**	**4,268**	**3,976**	**3,949**	**3,946**	**4,271**	**325**
NAVSEA full-spectrum centers												
NAWC-AD Warminster	2,555	2,543	2,604	2,591	2,581	2,557	273	270	270	270	273	
NAWC-WD China Lake	5,428	5,172	5,231	5,413	5,506	5,488	5,386	5,078	5,084	5,000	5,506	
NCCOSC/NRad San Diego	3,465	3,319	3,358	3,399	3,389	3,301	3,525	3,427	3,289	3,072	3,525	
NRad Warminster	303	265	278	281	274	281	284	279	279	279	303	
NSWC Carderock - Annapolis										0	0	
NSWC Carderock - Bayview										0	0	
NSWC Carderock - Carderock	2,939	2,971	2,870	2,929	2,922	2,881	2,689	2,777	2,602	2,484	2,971	
NSWC Dahlgren - Dahlgren	5,467	5,300	5,214	5,133	5,244	5,069	5,224	4,745	4,298	4,098	5,467	
NSWC Dahlgren - Panama city	1,210	1,207	1,300	1,333	1,246	1,242	1,300	1,242	1,131	1,091	1,333	
NSWC Dahlgren - White Oak										0	0	
NUWC Newport - New London										0	0	
NUWC Newport - Newport	3,950	3,733	3,877	3,836	3,838	3,872	3,651	3,721	4,434	4,195	3,950	
Total	**25,317**	**24,510**	**24,732**	**24,916**	**25,000**	**24,691**	**22,332**	**21,539**	**21,387**	**20,489**	**23,328**	**2,839**
Other R&D												
Civil Engineering Lab	330	372	429	395	435	390	419	407	415	419	435	
NCTRF	60	60	60	60	60	56	55	55	54	54	60	
NTSC	1,319	1,323	1,312	1,311	1,298	1,228	1,185	1,094	1,004	968	1,323	
Total	**1,708**	**1,755**	**1,801**	**1,766**	**1,793**	**1,674**	**1,659**	**1,556**	**1,473**	**1,441**	**1,818**	**377**
Engineering centers												
NADOC	0	0	445	289	300	316	298	293	286	279	445	
NAESU	1,697	1,578	1,464	1,482	1,120	1,107	1,078	1,013	977	986	1,697	
NAVMASSO	317	347	373	345	327	317	309	301	303	291	373	
NAVSEACENLANT Charleston										0	0	
NAVSEACENLANT HQ		511	512	490	575	577	590	595	600	600	600	
NAVSEACENLANT Mayport										0	0	
NAVSEACENLANT New London										0	0	
NAVSEACENPAC HQ			525	554	586	578	588	567	559	522	588	
NAVSEACENPAC Mare Island										0	0	
NAVSEACENPAC Pearl Harbor										0	0	
NAWC-AD Indianapolis	3,024	3,073	3,198	3,304	3,364	3,424	3,326	3,230	2,912	2,881	3,424	
NAWC-AD Lakehurst	2,398	2,412	2,461	2,417	2,422	2,281	2,222	2,171	1,927	1,859	2,461	
NAWC-AD Trenton	703	687	695	715	750	728	592	544	487	465	750	
NESEA St. Inigoes	344	359	401	393	385	389	389	360	335	319	401	
NESEC N. Charleston	326	326	354	370	358	358	355	333	296	283	370	
NESEC Portsmouth, VA	440	442	467	454	445	437	429	398	361	344	467	
NISE West San Diego			621	662	606	616	616	540	511	493	662	
NISE West Vallejo		370	353	332	338	327	328	257	243	215	215	
NISE West Pearl Harbor	233	287	327	320	320	312	286	208	194	192	327	
NESSEC Washington, DC				168	165	156	146	141	134	130	168	
NSWC Carderock - Philadelphia	1,310	1,593	1,702	1,812	2,017	2,068	1,850	1,823	1,674	1,598	2,068	
NSWC Crane - Crane	3,210	3,505	3,490	3,708	3,671	4,002	3,867	3,648	6,108	5,537	4,002	
NSWC Crane - Louisville	2,493	2,527	2,532	2,472	2,251	2,264	2,705	2,561	0	0	2,705	
NSWC Indian Head	2,337	2,323	2,351	2,265	2,459	2,809	2,733	2,515	2,315	2,243	2,809	
NSWC Port Hueneme - Norfolk (Note 1)									46	45	46	
NSWC Port Hueneme - Pt Huen.	1,965	1,936	1,953	1,953	2,003	2,035	2,587	2,533	2,103	1,943	2,587	

14-Apr-93

Technical Center	Location	MV	Man WY	Hours total
Naval Air Warfare Center (Weapons Division) - China Lake	China Lake, CA	57.73	5,506	75164
Naval Air Warfare Center (Aircraft Division) - Patuxent River	Patuxent River, MD	57.66	5,033	6965
Naval Undersea Warfare Center - Keyport	Keyport, WA	53.24	3,678	646
Naval Air Warfare Center (Weapons Division) - Point Magu	Pt. Mugu, CA	52.95	4,458	6094
Naval Surface Warfare Center - Indian Head	Indian Head, MD	52.88	2,809	56489
Naval Air Warfare Center (Aircraft Division) - Lakehurst	Lakehurst, NJ	52.77	2,461	53680
Naval Undersea Warfare Center - Newport	Newport, RI	51.85	3,950	51219
Naval Research Lab	Washington, DC	49.11	4,271	47269
Naval Command, Control and Ocean Surv. Ctr. (NCCOSC)/NCCOSC RDT&E (NRAD)	San Diego, CA	47.43	3,525	42998
Naval Electronic Systems Engineering Center	Portsmouth, VA	47.36	467	39473
Explosive Ordnance Disposal Tech Center	Indian Head, MD	44.07	267	39006
Naval Surface Warfare Center - Dahlgren	Dahlgren, VA	43.96	5,467	38739
Naval Surface Warfare Center - Crane	Crane, IN	43.78	4,002	33272
Naval Undersea Warfare Center - Newport	New London, CT	43.46		29270
Naval Surface Warfare Center - Port Hueneme	Pt. Hueneme, CA	40.96	2,644	29270
Naval Training Systems Command (NTSC)	Orlando, FL	40.54	1,323	26626
Naval Surface Warfare Center - Dahlgren (Coastal Systems Station)	Panama city, FL	40.52	1,333	25303
Naval Surface Warfare Center - Crane	Louisville, KY	39.54	2,705	23970
NCCOSC In-Service Engineering, West Coast Div. (NISE West)	San Diego, CA	39.50	662	21265
Naval Electronic Systems Engineering Center	North Charleston, SC	39.34	370	20603
Naval Air Warfare Center (Aircraft Division) - Indianapolis	Indianapolis, IN	39.16	3,424	20233
Naval Electronic Systems Engineering Activity (NESEA)	St. Inigoes, MD	39.14	401	16809
Naval Air Warfare Center (Weapons Division) - Barking Sands	Barking Sands, HI	39.09	108	16408
Naval Surface Warfare Center - Carderock	Carderock, MD	38.84	2,971	16300
Naval Surface Warfare Center - Carderock	Annapolis, MD	38.03		13329
Naval Surface Warfare Center - Dahlgren	White Oak, MD	37.28		13329
Naval Surface Warfare Center - Port Hueneme	Virginia Beach, VA	34.74	390	13329
NCCOSC/NCCOSC RDT&E - Warminster Detachment	Warminster, PA	34.51	303	12939
Naval Air Warfare Center (Aircraft Division) - Trenton	Trenton, NJ	33.08	750	12636
Naval Undersea Warfare Center - Newport	Norfolk, VA	32.19	888	11886
Naval Sea Logistics Center	Mechanicsburg, PA	31.69	364	10998
NISE West Activity	Pearl Harbor, HI	31.55	327	10634
Naval Surface Warfare Center - Carderock	Philadelphia, PA	30.96	2,068	10307
Naval Sea Support Center - Atlantic (NAVSEACENLANT)	Charleston, SC	30.78		82
Naval Electronics Security Systems Engineering Center (NESSEC)	Washington, DC	30.71	168	82
Planning, Estimating, Repair, & Availability (PERA) CV	Bremerton, WA	30.38	138	8071
NAWC-AD Warminster	Warminster, PA	30.27	273	7933
Naval Sea Support Center - Atlantic (NAVSEACENLANT) HQ	Norfolk, VA	29.76	800	7660
NSWC - Port Hueneme (Naval Mine Warfare Eng. Act. - NMWEA)	Yorktown, VA	29.67	225	7060
Naval Sea Support Center - Atlantic (NAVSEACENLANT)	Mayport, FL	29.30		6835
PERA (Surface) Atlantic	Norfolk, VA	29.19	86	6835
Navy Management System Support Office (NAVMASSO)	Chesapeake, VA	28.94	373	6749
Sea Automated Data Systems Activity (SEAADSA)	Indian Head, MD	28.12	94	6376
Naval Civil Engineering Laboratory (NCEL)	Pt. Hueneme, CA	27.78	435	6282
Naval Warfare Assessment Center	Corona, CA	27.62	1,511	5847
Naval Aviation Depot Operations Center (NADOC)	Patuxent River, MD	27.16	445	4336
Naval Surface Warfare Center - Carderock	Bayview, ID	27.11		3891
Naval Sea Support Center - Pacific (NAVSEACENPAC)	Mare Island, CA	25.96		3891
Naval Sea Support Center - Pacific (NAVSEACENPAC)	Pearl Harbor, HI	25.91		3891
Naval Aviation Maintenance Office (NAMO)	Patuxent River, MD	25.26	173	3891
Naval Sea Support Center - Atlantic (NAVSEACENLANT)	New London, CT	25.06		3718
NISE West Detachment - Vallejo	Vallejo, CA	23.25	215	3718
Submarine Maintenance, Engineering, Planning & Procurement (SUBMEPP)	Portsmouth, NH	21.75	260	3503
Naval Sea Support Center - Pacific (NAVSEACENPAC) HQ	San Diego, CA	21.58	588	3243
Naval Aviation Technical Services Facility (NATSF)	Philadelphia, PA	21.35	344	2655
AEGIS Training Center	Dahlgren, VA	18.88	55	2311
Naval Sea Logistics Center Detachment	Philadelphia, PA	18.08	70	2256
PERA (Surface) Pacific	Treasure island, CA	17.56	89	2188
Naval Aviation Engineering Services Unit (NAESU)	Philadelphia, PA	17.16	1,697	2097
Navy Clothing and Technical Research Facility (NCTRF)	Natick, MA	16.84	60	400
SEA SPARROW Project Office	Washington, DC	16.49	35	340
PERA (Surface) HQ	Philadelphia, PA	14.34	265	305
Navy Technical Representative's Office, APL/JHU	Laurel, MD	12.41	40	40

31-Mar-93

TECHNICAL CENTER CAPACITY ANALYSIS

Technical Center	Backlog workyears FY-86	FY-87	FY-88	FY-89	FY-90	FY-91	FY-92	FY-93	FY-94	FY-95	Maximum Impacted workyears	Excess in function
SWC Port Hueneme - SD (Note 2)	46	46	44	46	48	51	52	52	57	53	57	
SWC Port Hueneme - Va. Beach	344	256	291	302	292	312	251	251	223	208	344	
SWC Port Hueneme - Yorktown	215	214	219	223	225	225	215	205	181	175	225	
UWC Keyport	3,535	3,383	3,351	3,222	3,386	3,678	3,546	3,215	3,066	2,924	3,678	
UWC Newport - Norfolk	480	513	562	667	825	888	731	705	0	0	888	
ERA (CV)	137	114	118	129	130	137	138	138	138	138	138	
ERA (Surface) Atlantic	70	70	69	75	86	75	72	68	68	64	86	
ERA (Surface) HQ	218	218	195	260	265	225	210	209	199	192	265	
ERA (Surface) Pacific	74	65	69	74	68	89	88	85	83	78	89	
UBMEPP		242	247	252	260	255	259	255	256	255	260	
otal	25,916	27,407	29,399	29,755	30,047	31,036	30,856	29,214	26,642	25,312	33,195	7,883
&E Centers												
AWC-AD Patuxent River	2,401	2,462	2,591	2,650	2,787	2,838	5,033	4,881	4,527	4,178	5,033	
AWC-WD Barking Sands	81	80	92	96	103	107	108	108	108	108	108	
AWC-WD Point Mugu	4,030	4,458	4,336	4,362	4,316	4,344	4,284	4,064	3,928	3,833	4,458	
otal	6,512	7,000	7,019	7,108	7,206	7,289	9,425	9,053	8,563	8,119	9,599	1,480
ogistics engineering centers												
AMO	0	0	147	154	173	160	157	149	143	137	173	
ATSF	328	344	343	322	304	339	336	330	319	306	344	
AVSEALOGCEN	128	255	355	363	364	348	318	299	286	271	364	
AVSEALOGCEN Det	67	70	68	65	63	57	53	54	53	52	70	
otal	523	669	913	904	904	904	864	832	801	766	951	185
ther												
EGIS Education Center			26	38	44	48	48	55	55	55	55	
OD Tech Center	210	250	240	262	247	251	267	265	248	253	267	
av Tech Rep Office APL	33	26	38	31	40	26	18	15	15	15	40	
av War Assessment Ctr	1,438	1,484	1,461	1,498	1,511	1,338	1,277	1,313	1,220	1,214	1,511	
ea Sparrow Project Office	20	24	27	27	30	30	30	34	35	35	35	
EAADSA	85	83	84	83	94	87	70	65	20	12	94	
otal	1,786	1,867	1,876	1,939	1,966	1,780	1,710	1,747	1,593	1,584	2,002	418

Total capacity (WY) 75,194
Total excess (WY) 13,507

ote 1: Belongs to NSWC Port Hueneme - Va. Beach.
ote 2: Belongs to NSWC Port Hueneme.

Excess Capacity Methodology

Ideal Excess Capacity*

Total number of hours you can feasibly operate your facility times the number of simultaneous missions you can run minus projected workload in hours

*If excess capacity is driven to zero, all remaining facilities must be operated at the unconstrained capacity rate. This assumes the facility is operating independently of all other facilities and that the number of people is not a limiting factor.

QUESTIONS (DATA ELEMENTS)

- Navy prefers that Cross-Service Working Group provide the Measures of Merit and but not the specific Questions.
- Army and Air Force prefer Working Group provide the Questions to be used in data call. However, Army TABS office has already stated they may or may not use these Questions.
- If the Services do not use the same Questions, how will they insure comparable data is collected?

DRAFT -- February 28, 1994

SUBJECT: INTERNAL CONTROL PLAN (ICP) FOR MANAGEMENT OF BRAC 95 TEST AND EVALUATION (T&E) JOINT CROSS-SERVICE GROUP

REFERENCES: (a) Defense Base Closure and Realignment Act of 1990 (P.L. 101-510 as amended by P.L. 102-190)

(b) USD(A&T) Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 3, 1994

(c) DEPSECDEF Memorandum, "1995 Base Realignment and Closures (BRAC 95)," January 7, 1994

1. Purpose. This memorandum describes the management controls that will guide and regulate the DoD Test and Evaluation (T&E) Joint Cross-Service Group's actions to comply with the requirements of reference (a) and the direction contained in references (b) and (c).

2. Background. Part A, Title XXIX of Public Law 101-510, as amended by Public Law 102-190 and Public Law 103-160, establishes the exclusive procedures under which the Secretary of Defense may pursue realignment or closure of military installations inside the United States, with certain exceptions. The law established independent Defense Base Closure and Realignment Commissions to review the Secretary of Defense's recommendations in calendar years 1991, 1993, and 1995. Reference (c) establishes six Joint Cross-Service Groups, one of which is the Test and Evaluation (T&E) Joint Cross-Service Group (T&EG). Reference (c) also directs that the T&EG must develop and implement an internal control plan for base realignment, closure, or consolidation studies to ensure the accuracy of data collection and analyses.

3. Scope. This internal control plan includes:

- Uniform guidance defining data requirements and sources;
- Systems for verifying the accuracy of data at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data; and
- An assessment by auditors of the adequacy of each internal control plan.

4. Internal Control Mechanisms. The objective of the internal control mechanisms employed by the T&EG is to ensure the accuracy and completeness of the information upon which the T&EG decisions and recommendations will be based. The two principal control mechanisms are organization and documentation.

a. Organizational Controls. There are two organizations which have primary responsibility for the T&E contribution to the BRAC 95 process: The T&E Joint Cross-Service Group (T&EG) itself and the secretariat to the T&EG that has been established by the T&EG Action Plan. The T&EG Secretariat (T&EGS) has been tasked to develop procedures and methods to maintain the records required by the T&EG. The DoD Inspector General (DoD IG) services as technical advisor to the T&EG and as the field auditor for data gathered in support of T&EG activities. The specific responsibilities of these organizations for ensuring internal control requirements are met are as follows:

(1) T&E Joint Cross-Service Group (T&EG). The T&EG is charged with developing analyses guidance and criteria for the use of the DoD Components while conducting cross-service analyses in the T&E area, and for providing oversight of these analyses and making recommendations to the USD(A&T). The T&EG is responsible for ensuring a fair and complete evaluation is made of the T&E facilities and installations in accordance with the provisions of reference (a). This includes overseeing the compilations of required data and information; and making decisions regarding analyses guidelines, standards, assumptions, measures of merit, data elements, excess capacity, military value, and other impacts.

(2) Secretariat for T&E Joint Cross-Service Group (T&EGS). The chairs of the T&E Joint Group have established from members of their own staffs, a secretariat for the group. The secretariat is led by the Deputy Director, Test Facilities and Resources, (D,T&E) in close coordination with the Deputy Director, Resources and Administration, (D,OT&E). From the date of receipt of the DEPSECDEF BRAC 95 memorandum, the secretariat will develop procedures and methods to maintain the records required by the DEPSECDEF guidance. The secretariat will develop, as directed by the T&E Joint Cross-Service Group, and keep:

- Minutes of T&EG meetings. The minutes will be kept by the representative from the DASD (Economic Reinvestment and BRAC) and will not be circulated. Coordination by the co-chairs will be required as a minimum.

- Descriptions of how base realignment and closure policies, analyses and recommendations were made, including minutes of all deliberative meetings;

- All policy, data, information, and analyses considered in making base realignment and closure recommendations;

- Descriptions of how DoD Components recommendations met the final selection criteria and were based on the final force structure plan; and

- Documentation that addresses each recommendation to the Secretary of Defense to realign or close a military installation under the law.

(3) DoD Inspector General. Reference (c) states that the DoD Inspector General shall be available to assist the in developing, implementing, and evaluating internal control plans. The T&E Joint Cross-Service Group shall submit this internal control plan to the DoD IG for review and evaluation. If any data is collected directly as a result of the T&E Group's actions then the DoD IG will be requested to provide field audits that will review the supporting data and documentation used to develop the data that was submitted to the T&E Joint Cross-Service Group. The DoD IG will ensure audit standards are met and will advise the T&E Joint Group of any significant issues identified during the independent audit ass any such issues are identified.

b. Documentation Control. All significant events in the T&EG involvement in the BRAC 95 process will be promptly recorded and clearly documented to ensure the accuracy and completeness of the information used by the T&EG in performing evaluations of T&E facilities and installations. The following elements will be strictly adhered to:

(1) T&E Facility and Installation Data Base (TEFIDB). The TEFIDB will be the sole and authoritative data base for conducting cross-service analyses of T&E facilities and installations. The TEFIDB will contain all relevant data and information, pertaining to all T&E facilities and installations within the scope of the T&E Cross-Service Group. Specific procedures will be promulgated for development and maintenance of the TEFIDB. Elements included in the data base must have been certified in accordance with the attachment and will be subject to DoD IG source validity checks and data accuracy assessments.

(2) Certification. By the attached certification procedures, the Co-Chairs of the T&E Joint Cross-Service Group establish the policy implementing the requirements of the Act

that information submitted to the Secretary of Defense and to the Defense Base Closure and Realignment Commission must be certified as accurate and complete to the best of the certifier's knowledge and belief. The procedures outlined in that reference will ensure the accuracy and completeness of the data and information contained in the TEFIDB.

(3) Record Keeping. Minutes will be prepared by the representative of DASD (ER&BRAC) of all formal T&EG meetings which are part of the decision-making process in arriving at recommendations for base closure and realignment to be forwarded to the Secretary of Defense. Decision papers will be prepared to memorialize each decision made by the Group and the justification for that decision. All documents or data files on magnetic media forwarded from other sources, generated for the BRAC 95 process, and used for analyses, and all other documents that relate to the BRAC 95 process will be maintained in a library with controlled access by the T&EGS.

(4) Oral Briefings. From time to time, the T&E Cross-Service Group will receive formal and informal briefings from persons both in and out of the Federal government. If the T&EG considers any such briefing presents relevant and useful information or data, before such information or data can be entered into the TEFIDB, the T&EG must either (i) require the presenter (if a DoD employee) to reduce such information or data to writing, or (ii) request the appropriate DoD organization to replicate such information or data. In both cases, certification required by the attachment applies.

(5) Technical Experts. Technical experts will be utilized to support both the development and/or refinement of T&EG analytical efforts and its deliberations. When the T&EG utilizes the input of a technical expert, the specific contribution, notes, analyses, or other correspondence developed in support of the BRAC 95 process will be made a part of the TEFIDB. When technical experts provide information or data that the T&EG considers relevant and appropriate for consideration during their deliberations, the experts shall be requested to submit the information/data in writing with the required certification, so that it may be included in the TEFIDB. Whenever either the T&EG or the T&EGS incorporates the contribution of technical experts into the TEFIDB, the entry will include a description of the qualifications for designating an individual as a technical expert. For any information/data that is derived from an authoritative sources (e.g., a Federal, state, or local government agency), the document which includes the certification shall identify the source and provide adequate justification for relying on the source.

(6) Access to Data. Access to the TEFIDB will be limited to those persons identified by the T&EG and the T&EGS. Access to the TEFIDB by non-government personnel will be determined by the T&EGS and will be for the sole purpose of completing and maintaining the data base. Analyses of data from the TEFIDB will not be conducted by non-government personnel. Subsets of the TEFIDB will be provided as required to the DoD Components in the course of their analyses. During the periods when the data is in the custody of a DoD Component, the BRAC 95 Internal Control Procedures of the Component shall apply.

5. Responsibilities. The T&EG, the T&EGS, and the DoD IG will execute their responsibilities consistent with the provisions of references (b) and (c).

6. Implementation. This Internal Control Plan is implemented immediately and will be updated as necessary to enhance the level of management control needed to achieve the desired results of the references.

Charles E. Adolph Director Test and Evaluation	Lee H. Frame Acting Director Operational Test and Evaluation

STATEMENT OF OUTSOURCING POLICY
T&E JOINT CROSS-SERVICE GROUP

The T&E Joint Cross-Service Group has been directed by the DEPSECDEF to "identify necessary outsourcing policies and make recommendations regarding those policies." This paper contains the material to meet this requirement.

Terminology:

Government Owned, Contractor Operated (GOCO). The complete operation of a facility is contracted to a contractor (who may subcontract portions of the task). The contractor assumes the responsibility for management decisions and the application of his resources to the operation of the facility to meet the facility's mission requirements as stated in his contract. The government oversight is primarily from contracting officials. There may be situations where no government officials are physically located at the facility.

Contracted Out. Certain functions performed within the DoD are identified as "commercial activities" (CA). A CA is an activity that provides a product or service that is obtainable (or obtained) from a commercial source. There are two types of CAs. A contract CA is one that is managed by a DoD Component, but operated with contractor personnel. An In-House CA is operated by a DoD Component with DoD personnel (civilian or military). In this alternative, the government decides to contract for the performance of one or more CAs within a government owned and operated facility.

Policy:

The policy concerning "outsourcing" for T&E facilities and bases is:

a. In the conduct of analysis of alternatives concerning T&E facilities and bases to support the BRAC 95, the DoD Components should examine the alternatives for providing the required T&E capabilities by "outsourcing" the T&E facility or the base.

b. Outsourcing alternatives will include:

(1) Contracting-out the operation of the existing T&E facility,
(2) Converting the base to a GOCO, or
(3) Transferring the workload to another existing federal government or commercial test facility.

c. The transfer of T&E workload to a foreign facility will not be considered as an alternative that leads to the closing of a unique U.S. test facility.

Annex R

There is always a possibility that some future security requirements will prohibit the use of a foreign facility for testing. A foreign facility may be considered as an alternative to supplement the capacity of a U.S. facility.

Outsourcing Goal:

In contrast with other areas of DoD support operations, there is no goal for the amount or percentage of the DoD test facilities operation that will be performed by the commercial sector. Contractors are currently providing effective T&E facility operation and support at a number of DoD locations. Instead of a statement of a goal of a percentage that should be performed by the commercial sector, the determination of whether a commercial source or a governmental operation would be most advantageous will be made based on the conclusions from a specific case-by-case analysis.

Discussion:

While outsourcing by contracting for support from a commercial source is a viable and important option for some DoD common support functions, there is a limited application of this alternative to the T&E area. Commercial testing companies do exist and provide capability mostly at the subsystem and component level. Other U.S. Government agencies, e.g., NASA, possess the capability to provide significant system-level testing. The outsourcing approach that has been effectively applied in T&E is the use of contracted operation of DoD facilities and bases. The approach to date has primarily been through contracting for specific support services on an installation that is retained as a Government-Owned, Government Operated (GOGO) facility.

There is a limit on the number of analyses of outsourcing alternatives that should be examined. The limit on these analyses is to preclude the requirement for each DoD Components to investigate and evaluate a very large number of sources that are not really comparable to the large DoD test facilities and bases. A large majority of the DoD test facilities and bases are sited and operated because of the land, air, or sea space associated with the facility. The only external source alternatives for most major T&E mission areas are the facilities owned and operated by other U.S. Government agencies, e.g., NASA.

The examination of existing T&E facilities and bases will be extended to address the question of government development/ownership of new or improved T&E facilities as compared to contractor development/ownership. It is the policy of DoD to rely on commercial operation for all situations where that alternative will result in the most cost effective alternative. For each major new or improved T&E facility, the responsible DoD Component will consider the use of contracting out or GOCO as an alternative that must be evaluated.

CROSS-SERVICE T&E FUNCTIONAL AREAS

STANDARD DATA REQUIRED (OVERARCHING MEASURES OF MERIT)

These are standard, overarching measures of merit or data requirements applicable to all T&E functional areas. Additional specific measures of merit are shown under individual test categories:

1. Who, what, where
2. Categories and functions
3. Workload (Workyears)
   - -Historical
   - -Forecasted
   - -By types of testing
4. Interconnectivity
5. Condition (age, last upgrade)
6. Capacity - unconstrained
7. Environmental carrying capacity (including permits)
8 Specialized test support facilities and targets
9. Expandability
10. Replacement cost
11. Uniqueness
    - -Support of other services / in-service missions
    - -Other gov't / commercial

TEST CATEGORIES

1. Air Vehicles

This category includes the testing of all air vehicles whether fixed wing or rotary wing and test of major sub-systems. This includes flight testing and the testing involving pre- and post-flight preparation and processing of the air vehicle.

Appendix C

a. Fixed Wing

This category includes flight testing of all fixed-wing air vehicles including aircraft, unmanned air vehicles (UAVs), and cruise missiles.

Measures of Merit
Instrumentation
Supersonic (H,W,L)
Available airspace (all categories)
Airfield characteristics
(elevation, RW length, visibility)
Data reduction
Known limitations, as
-# of a/c supported
-Types of missions
Geographic features (including climatic)
Specialized features (e.g. Launch, jumps, etc.)

b. Rotary Wing

This category includes flight testing of all rotary wing air vehicles. It also includes the testing of subsystems and elements that are unique to the rotary wing craft such as rotors and rotor transmission assemblies.

Measures of Merit
Instrumentation
Available airspace (all categories)
Airfield characteristics
(elevation, RW length, visibility)
Data reduction
Known limitations, as
-# of A/C supported
-Types of missions
Geographic features (including climatic)
Specialized features (e.g. Launch, Jumps, etc.)

b. Rocket / Missile / Bomb Systems

This category includes the testing of all types of rocket, missile and bomb systems that are components of a larger weapon system. This includes testing of air-to-air, air-to-surface, and surface-to-air missiles.

Measures of Merit
Airspace (Sq miles and altitude)
Ground space (Sq miles)
Supersonic Corridors
Maximum Thrust
Maximum turn-around time between firings
Minimum turn-around time between engine installations
Limitations
Geographic features (including climatic)

c. Air Armaments

This category includes the testing of air armament systems including gun, ammunition movement systems.

Measures of Merit
Maximum firing range
Maximum power source
Limitations
Maximum ordinate

2. Electronic Combat

This category includes the testing of stand alone electronic combat systems and electronic combat sub-systems that are normally integrated into other weapon systems. It includes the testing of systems or subsystems that have as their primary mission threat warning, testing of systems that provide countermeasures in the RF spectrum against radars and other RF sensors, systems that provide countermeasures that are used against sensors in the electro-optical or infrared spectrum as well as testing of electronic and C3 countermeasures.

Measures of Merit
Number of simultaneous threats simulated
Number of simultaneous countermeasures that can be evaluated
Range of spectrum that can be tested and evaluated
Available spectrum
Threat representation/density
Open vs. closed loop
Max signal density
Geographic dispersion
- -Threat laydown
- -Representative distance

Moveable threat
Scene generation

3. Armaments / Weapons

This category of testing includes the testing of the weapons portion of a weapon system. In those cases where the weapon system is composed almost exclusively of the weapon, it may include system-level testing. In other cases, it addresses just the weapon subsystem, while the testing of the weapon system's vehicle is in another category.

a. Directed Energy

This category incudes all testing of types of directed energy weapons.

Measures of Merit
Maximum power source
Limitations
Maximum range
Maximum ordinate

SAMPLE QUESTIONS

Air Vehicles -- Fixed Wing

Supersonic airspace:

Do you have airspace within which you can conduct supersonic T&E operations?

Provide the dimensions of that space. Upper and lower altitudes, width, and length in nautical miles.

Is it over water, or over land?

How far is it from your runway?

What restrictions must you observe to use this space? For example, must you account for inversion layer funneling of the supersonic boom?

What is the maximum number of aircraft that can use the space simultaneously?

Available Airspace

- Use feet to describe altitudes
- Use nautical miles to describe other airspace dimensions

How many square miles of airspace is available to support test operations ?

What is the maximum length and width of your airspace ?

Describe the altitude profile for your airspace ?

How much is restricted airspace ?

Appendix D

Do you have special use airspace ?

What types of test do you support ?

What are the dimensions ?

Will this airspace support simultaneous multiple users ?

Is the airspace over land or water ?

Airfield Characteristics

Provide a brief description of your airfield(s) and support facilities.

How close are emergency runways and/or emergency airfields ?

How close are the working areas (airspace) for supporting test missions ?

What makes your airfield unique for supporting flight test ?

Is there a size, weight, maintenance or mission limitation that would effect test operations ?

If so, describe the limitation.

Including hangers and ramp space, how many fighter size aircraft could you support ? Multi-engine large aircraft ?

Known Limitations

What is the maximum number of simultaneous missions you can support that require telemetry ?

What is the largest number of simultaneous test missions you have supported in your airspace ?

What percentage of time are your test missions affected by weather ?

Are there limitations on the use of your space? If so, what are they?

T&E JOINT CROSS-SERVICE GROUP

STATUS OF ACTIONS

REPORT TO BRAC '95 STEERING GROUP

1 MARCH 1994

Appendix E

T&E JOINT CROSS-SERVICE GROUP STATUS

ACCOMPLISHED

- Internal Control Plan (provided to Steering Group Subgroup)
- Outsourcing Policy
- Statement of Objective
- Standards
- Process with Schedule
- Cross-Service Funtional Areas

IN PROGRESS

- Assumptions
- Guidance for Data Collection
- Guidance for Data Analysis
- Definitions of Functional Areas
- Figures of Merit per Functional Area
- Data Elements

T&E JOINT CROSS-SERVICE GROUP
EXTERNAL PROBLEM AREAS

OUTSOURCING: How to collect data that can be certified?

- Commercial bids are time consuming and perishable
- Opportunities as potential for closure without savings information

CONSOLIDATING FUNCTIONAL AREAS: How to investigate consolidating non-T&E functions (e.g., labs, training, depot maintenance test facilities, program offices)

- Beyond T&E Group purview
- May impact cross- Service opportunities

CROSS-SERVICE ANALYSIS: What is methodology for cross-Service analyses by the components?

"CLASSIFIED" FACILITIES: Handling data, and cross-Service analyses?

FINAL FORMAT FOR 31 MARCH: Need guidance.

BACKUPS

PRODUCTS OF T&E JOINT CROSS-SERVICE GROUP

AS OF 1 MARCH 1994

Certification Procedures

PURPOSE.

The Defense Base Closure and Realignment Act of 1990, as amended (P.L. 102-190) requires a certification by each person who is in a position the duties of which include personal and substantial involvement in the preparation and submission of information and recommendations concerning the closure or realignment of military installations.

COMMITMENT TO DATA ACCURACY AND RELIABILITY.

The T&E Joint Cross-Service Group (T&EG) will take such efforts as are deemed necessary to ensure that the information used concerning the closure or realignment of an installation is complete, accurate, and reliable.

The T&EG will ensure that information submitted to the T&EG for the preparation of its recommendations to the USD(A&T) or the BRAC 95 Steering Group, and information that will be submitted through the T&EG to Secretary of Defense or the Commission be certified accurate and complete to the best of one's knowledge and belief. Certification statements will be used as further evidence and documentation that the information has been reviewed and validated.

The T&EG will use the DoD IG to conduct a detailed examination of methodologies employed, decision processes followed and data used.

PROCEDURES.

The T&EG will receive information and data primarily from the DoD Components, and from the T&E Board of Directors. Each of these sources shall identify to the T&EG one or more certifying officials who will certify all information or data provided to the T&EG for use in its deliberations or analyses.

Information that is obtained by the T&EG from other sources, such as previous or on-going T&E studies, will be submitted to the DoD Components for their review and certification.

GUIDANCE.

The Secretariat of the T&E Joint Cross-Service Group will issue any additional guidance concerting the certification requirement that becomes necessary. The T&EGS will require documentation form key individuals and organizations on the steps they are taking to ensure the accuracy and reliability of the information being provided.

services with T&E attributes for the weapon systems functions against which they can match their current/programed capabilities.

Step 2: From the above data, the following must occur:

1. Identification of excess capacity, quantified

2. Determine how much capacity should be set aside (standard) for all facilities.

3. Identify facilities that should not be considered for any alternatives due to uniqueness, etc.

4. Identify potential areas that warrant further study

5. Develop scenerios and send back via BRAC process to service for FULL ANALYSIS, via BRAC closure study guidelines. This step is envisioned to collect the full set of data necessary to asses if an alternative is viable/executable and to get the services "RECOMMENDATION".

Step3. Evaluate Serivce provided data from scenerios and assess if any addditional data is necessary. Place subsequent 3rd specific data call.

Step 4. Provide the JCSWG with concurrence/nonconcurrence with Services's recommendations. Propose alternatives via OSD process to SECDEF if there is an disconnect with Services RECOMMENDATIONS..

Specific Alternatives:

In addition to this policy statement, the T&E Joint Group will identify specific outsourcing alternatives that are to be analyzed. These specific alternatives will be included in the analysis guidance and the DoD Components will examined the alternatives during their analyses.

K

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, March 22, 1994

Minutes

The tenth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation convened at 0900. Mr. Lee Frame and Mr. John Burt chaired the meeting. A list of attendees is attached.

The subgroup briefed their progress in determining the cross-service analysis plan, measures of merit, workload projection and issues/concerns of the subgroup.

Discussion ensued on measures of merit. A concern arose over the use of interconnectivity and its necessity. The Group agreed it should be kept as a measure, but to have the subgroup reexamine its placement of categories. Discussion also centered in on whether unmanned vehicles were incorporated in the data elements. The subgroup will ensure this receives attention in a future meeting.

The discussion then turned to issues or concerns of the subgroup. The subgroup believes it is important to develop a milestone schedule for activities to be completed between the March 31, 1994, and January 1, 1995 time frame. The Group agreed to the necessity, however they determined it was not time sensitive to accomplish before April 1, 1994. This issue has been tabled for consideration at a later meeting.

The subgroup reported on an agreement reached on workload projection. The outstanding issue for the subgroup to resolve is in defining capacity. Once this has been completed, the subgroup will seek the Group's agreement on the completed excess capacity analytical process.

The Group then received an overview on the Steering Group meeting held on March 15, 1994. The significant issue passed on to the Group was a future meeting of Service principals from the Steering Group to begin discussion and resolution to the cross-service analysis.

The Laboratory Joint Cross-Service Group update of their progress centered on an agreement that common data elements and questions will be drafted by the Laboratory Cross-Service Group. Additionally, they briefed the Group on an agreement that all contractors, to include FFRDCs, that are working on the installation providing work for the lab function will be counted as part of the capacity analysis.

The meeting adjourned at 1000 hrs.

Approved: _____
Lee Frame
Co-Chairman

_____
John Burt
Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

March 22, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Burt, Co-Chair
Mr. John Bolino, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Doug Nation, Air Force
Mr. Parker Horner, Air Force
Mr. Joe Dowden, Air Force
Col Rob Bongiovi, Air Force
Lt Col George London, Air Force
Mr. Jere Brinkley, Air Force
Mr. Walt Hollis, Army
Mr. John Gehrig, Army
Mr. Gary Holloway, Army
MAJ Jack Marriott, Army
MAJ Essex Fowlks, Army
Mr. Tom Roller, Army
Mr. Gerald Schiefer, Navy
CAPT Dave Rose, Navy
Ms. Kathleen Ruemmele, BMDO
Mr. Robert Bayer, DASD(ER&BRAC)
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Irv Boyles, OSD T&E
Col Tom Baker, DISA
Ms. Jeanne Karstens, OSD Comptroller
Mr. Frank Lewis, OSD PA&E
Mr. Bruce German, OSD T&E

The T&E Joint Cross-Service Group Meeting
9:00a.m., Tuesday, 22 Mar.,1994
Room 1C730

- Opening Remarks
- Review Minutes
- T&E Sub-Group Update:
  - Where are we?
  - Concerns/issues
- Workload Projection
- Data and Measures of Merit Framework
  - Who will conduct analysis?
- Feedback from 15 March BRAC 95 Steering Group
- Laboratory Group Update
- Key Action Items:
  - Measures of Merit and data elements completed
  - Mar 15 -Finalize all documentation for BRAC 95 Steering Group Review
  - Mar 25 - Finalize per Steering Group inputs
- Wrap-Up/Today's Action Items

MEMORANDUM FOR T&E BRAC JCSG PRINCIPALS

FROM: T&E BRAC JCS WORKING GROUP

SUBJECT: Read Ahead Package for 22 March 1994 T&E JCSG Meeting

The attached is the draft data call package that has been developed by the T&E BRAC Joint Cross Service Working Group to date. Improvements to this package are still being worked. It includes guidance to the Services in collecting the data, and common questions, the answers to which will support analyses by the Services individually and the Services working together as a joint analysis team under the auspices of the T&E JCSG.

The package has been formatted based on the suggested format from the Steering Group. Minor format changes have been made to maintain the coherence and flow of the package. The JCS Working Group emphasizes that the common questions presented in the package be forwarded to each Service. And, we feel it is very important to get the data back by 1 July 1994 to support joint cross-service analysis in a timely manner.

It is important to recognize that two methods for determining workload projections have been agreed upon. One, the Services will each use methods of their choosing to take a "macro" look at the T&E facilities. Two, the joint analysis team will use a modified version of the "Army" method to take a "micro" look at the T&E facilities.

Another issue is the need to develop a detailed schedule of what activities that must be accomplished between 31 Mar and Jan 95. For example, evaluation criteria (filters) must be established to evaluate the data for military value. Also, who will take ownership to develop the data base for use by the cross-service groups as stated in the draft T&E internal control plan. These are but two of the unresolved issues with other remaining to be addressed.

Army _____

Navy _____ (Navy does not concur on the 7/1/94 deadline)

Air Force _____ LTCol

T&E JOINT CROSS-SERVICE GROUP DATA PACKAGE

(March 20, 1994)

SECTION 1: Guidance, standards and assumptions
1.1 GUIDANCE
1.2 ASSUMPTIONS
1.3 FUNCTIONAL CATEGORIES

SECTION 2: CAPACITY & TECHNICAL RESOURCES
2.1.A WORKLOAD
2.1.B FORECASTED WORKLOAD (is this the right methodology?)
2.1.C UNCONSTRAINED CAPACITY
2.1.D TECHNICAL RESOURCES

SECTION 3: MILITARY VALUE

3.1 GENERAL QUESTIONS FOR ALL T&E FUNCTIONAL AREAS
3.1.A INTERCONNECTIVITY
3.1.B ENVIRONMENTAL AND ENCROACHMENT
3.1.C SPECIALIZED TEST SUPPORT FACILITIES
3.1.D EXPANDABILITY
3.1.E UNIQUENESS

3.2 AIRCRAFT
3.3 EC
3.4 ARMAMENTS/WEAPONS

T&E JOINT CROSS-SERVICE GROUP

SECTION 1: Guidance, standards and assumptions

The Services will use the following information for data collection and analysis.

GUIDANCE 1.1::

1.1.A. GUIDANCE FOR IDENTIFICATION OF TEST AND EVALUATION FACILITIES / CAPABILITIES

The smallest identifiable work entity consisting of a set of DoD-owned or controlled property (air / land / sea space) or any collection of equipment, platforms, ADPE or instrumentation that can conduct a test and evaluation (T&E) operation and provide a deliverable T&E product.

The T&E facility can support T&E of components through systems platforms or missions in the following categories: air, land, naval, space, C4I, munitions, electronic combat, nuclear effects, chem/bio, propulsion, environmental effects, directed energy, guidance and materials.

The T&E operation can be any one of the following functions: modeling and simulation, measurement, integration laboratory, hardware-in-the-loop, installed systems, open air range, or test mission support. It will typically consist of all of the following components: data collection sensors and instrumentation, data reception and storage, data processing, and data display and reporting.

(The scope will include T&E operations from all funding sources (RDT&E, procurement, O&M, training, etc.).

1.1.B GUIDANCE FOR SERVICES DATA COLLECTION

The Services will use the T&E facility/capability definitions includes within this data call package. In your estimates for facility technical capabilities include funded investments/upgrades in service or defense agency 95FYDP. When calculating capacity data, use the guidelines/definitions included in this package.

1.1.C GUIDANCE FOR SERVICES DATA ANALYSIS

The Services will use the 1995 FYDP as the baseline to calculate costs and savings. Address closure/realignment opportunities at the functional T&E and facility levels. Retain essential technical capabilities for core competencies and technologies. Consider consolidation of subfunctions such as centralized maintenance of common platforms, instrumentation, data processing. Consider retention of difficult-to-replace

essential geographic assets (e.g. airspace, ground/terrain, climates, seaports) without regard to "ownership". Recognize adaptability to future technologies. Do not consider environmental cleanup costs/difficulties for closure or downsizing a facility/capability.

ASSUMPTIONS 1.2:

The Services will factor in the following assumptions for their analysis:

1.2.A T&E workload is not a direct function of force structure. At least one test facility/capability will be required to address any technology in use or nearing maturation. Geographic assets must be adequate. Closure or realignments of laboratories, maintenance depot, and training activities could necessitate consolidation with test facilities/capabilities. Evaluation of developing technologies and systems will follow a process that involves a progression of test facilities/capabilities ranging from modeling and simulation, component measurement, through hardware-in-the-loop, system integration laboratories, installed-systems, to open air/field. Potential for internetting facilities/capabilities can be considered in workload projections if investments to provide internetting capability are programmed.

FUNCTIONAL CATEGORIES 1.3

The Services will align their T&E infrastructure with the following T&E functional areas: :

1.3.A Air Vehicles (fixed wing, rotary wing)

This subcategory includes facilities involved in the testing of all air vehicles whether fixed wing or rotary wing and test of major sub-systems. This includes flight testing and the testing involving pre- and post-flight preparation and processing of the air vehicle.

1.3.B Electronic Combat (EC) Systems

This subcategory includes facilities involved in the testing of stand-alone electronic combat systems and electronic combat sub-systems that are normally integrated into other weapon systems. It includes the testing of systems or subsystems that have as their primary mission threat warning, testing of systems that provide countermeasures in the RF spectrum against radars and other RF sensors, systems that provide countermeasures that are used against sensors in the electro-optical or infrared spectrum as well as testing of electronic and C3 countermeasures.

1.3.C Armaments / Weapons (directed energy, rocket/missile/bomb systems, air armaments)

This subcategory includes facilities involved in the testing of the weapons portion of a weapon system. In those cases where the weapon system is composed almost exclusively of the weapon, it may include system-level testing. In other cases, it addresses just the weapon subsystem, while the testing of the weapon system's vehicle is in another category.

SECTION 2: CAPACITY & TECHNICAL RESOURCES

USE THE FORMS AND ACCOMPANYING INSTRUCTIONS THAT FOLLOW SECTION 2.1.C TO PROVIDE YOUR ANSWERS FOR THE FOLLOWING QUESTIONS. ALSO, YOUR DATA MUST BE FOR THE INSTALLATION AND FACILITY.

IDENTIFY BY TEST TYPES (% OF T&E, S&T, DE, IE, T&D) CORRELATED TO T&E FUNCTIONAL AREAS (EC,AIRCRAFT, MUNITIONS), RESOURCE DESCRIPTION & MISSION STATEMENT, SUMMARY TECHNICAL CAPABILITIES (FACT SHEET), PERSONNEL, FACILITY CONDITION, SQ FT/EQUIPMENT AND CAPITAL INVESTMENTS, AND UNCONSTRAINED CAPACITY (RUMS).

2.1 Workload

2.1.A Historical Workload

2.1.A.1 What amount of workload have you performed each year from FY86-93? Provide this as number of total test hours, number of missions, and manhours per year for the installation and facility.

2.1.B Forecasted (is this the right methodology?)

2.1.B.1 What appropriations (by program element) paid for testing/or are expected to pay for testing in your Service (by functional areas of aircraft, EC, armament/weapons, and other T&E) for FY92/3 and FY95 FYDPs?

2.1.B.2 What amount of test work was performed at your facility (in workyears by functional areas of aircraft, EC armament/weapons, other T&E, and other) in FY92 & 93.?

2.1.C Capacity - unconstrained

2.1.C.1 What is the maximum capacity of this facility, assuming manpower and consumable supplies (excluding utilities) are unlimited, but assuming adequate maintenance downtime?
2.1.C.2 Is this capacity limited by the physical characteristics of the facility itself, safety or health considerations, commercial utility availability, etc?

Unconstrained Workload Methodology: (INSERT REVISION 3/21)
Use both workload terms and clock hour for determining capacity. Determine clock hours first, then convert to workyears, flight hours, air-on hours, direct labor hours, or other workload measure. Steps in determining unconstrained capacity and excess capacity are:

2.1.D Technical Resources

-2.1.D.1 What DoD organization owns and/or operates it?
- 2.1.D.2 Where is it located, who is the host, is it located on a DoD installation or Government Land?
- 2.1.D.3 Please provide the mission statement.
- 3.1.A.5 Does the facility have a specified war-time or contingency role established in approved war plans?
- 3.1.A.6 Does the facility provide a T&E product or service, without which irreparable harm would be imposed on the test mission of the host installation? ...on the test mission of any other activity? ...on any other mission deemed critical to the operational effectiveness of the armed forces of the United States?
- See also the questions under facilities, covering projected workload and capacity.

3.1.B. Category/ functions, Technical Capabilities

-3.1.B.1 What test functions do you routinely perform? (M&S, IL, HWIL, Measurement, ISTF, and OAR (see definitions _____).
-3.1.B.2 What types of test categories as defined in part II below do you support?.
-3.1.B.3 What types of users have historically used this facility? Indicate percentage of total workload.
-3.1.B.3 What are your technical capabilities including manpower, condition of facilities, replacement value (facility and equipment)

SECTION 3.0 MILITARY VALUE

Over-arching Measures of Merit (Standard Data Required)

These are standard, overarching measures of merit or data requirements applicable to all the functional areas. These generally relate to the overall demographics of the facility or installation, are important to evaluating the overall condition of the facility; its potential to support current or future contingency, mobilization and future missions; and its overall Mission Essentiality. Additional specific measures of merit are shown under individual test categories. The over-arching measures of merit are listed below, and are repeated on subsequent pages, with accompanying questions (or data requirements) intended to elicit standard information upon which the service cross-service analyses can be based, and on which the Joint Cross-Service Groups can base their reviews of the service analyses.

3.1.A. Interconnectivity

-3.1.A.1 What percentage of total test workload in FY93 involved the real-time or near real time exchange of data or control with another facility? List the facilities you interconnect to for test and identify how many are simultaneous activities. Identify these as to whether they are internal and external to the site.

3.1.A Facility Condition

-3.1.B.1 What is the age, replacement value, maintenance and repair backlog of the facility?
- What was the date and nature of last upgrade?

-3.1.B.2 What are your planned major upgrades in the 95 FYDP? Provide the programmed amount and summary description.

3.1.C Environmental and Encroachment Carrying Capacity (including treaties and permits)

- **3.1.** C.1 What limiting (current or future) environmental and encroachment characteristics are associated with the installation/facility?
- 3.1.C.2 How much could operations be expanded before this limit would be reached?
- **3.1.C.3** Do you currently operate under temporary permits of an environmental nature, or voluntary agreements (including treaties) of any sort that deal with the environment? If so, when do they expire?
- 3.1.C.4 What is the total population within a 50 mile radius? 100 mile radius? 150 mile radius? 200 mile radius?

3.1.D Specialized test support facilities and targets

-3.1.D.1 What specialized facilities are required to support this T&E facility? (e.g. Aerial delivery load build-up facilities, parachute drying towers/packing facilities; paratroop support facilities; specialized fuel storage and delivery systems; mission planning facilities; corrosion control, painting, washing facilities; specialized maintenance facilities such as avionics intermediate shops, etc.)

-3.1.D.2 What specialized targets are required to support this facility?

3.1.E Expandability

- **3.1.E.1** Other than the expandability inherent in unconstrained capacity, discussed earlier, describe any special aspects of this facility that enhances its ability to expand output within existing categories of T&E? into new areas of T&E capability?
-**3.1.E.2** Are airspace, land, water areas--adjacent to that already under the control of the DoD-- available and/or suited for physical expansion to support new missions or increased footprints associated with new generations of equipment (e.g. longer range artillery requiring longer, wider ranges) within the existing mission?

3.1.F Uniqueness

- **Support of other services / in-service missions**

-**3.1.F.1** Is this a one-of-a-kind facility within the DoD? within the US Government? Within the US?
- **3.1.F.2** Are you currently providing support to DoD users outside your service?

3.2. Air Vehicles

This category includes the testing of all air vehicles whether fixed wing or rotary wing and test of major sub-systems. This includes flight testing and the testing involving pre- and post-flight preparation and processing of the air vehicle

3.2.A <u>Fixed Wing--Measures of Merit</u>

This category includes flight testing of all fixed-wing air vehicles including aircraft, unmanned air vehicles (UAVs), and cruise missiles.

3.2.A.1 Air Space

3.2.A.1.1 Supersonic

- Do supersonic corridors or areas exist?
- Where are they located relative to your airfield?
- At what altitude(upper and lower altitude)?
- Over land or water? What size and shape (length and width)?
- What restrictions must you observe to use this space? For example, must you account for inversion layer funneling of the supersonic boom?
- What is the maximum number of simultaneous users?

-3.2.A.1.2 Available airspace (all categories, altitude in feet, other dimensions in nautical miles)

- How many square miles (length x width) is available to support test operations?
- Who owns and or controls the land under the restricted airspace you use?
- How much of this is Restricted Airspace, and what altitude limits are associated with the restricted areas?
- Do you have special use airspace other than supersonic airspace? for what types of test (e.g. terrain following radar)? dimensions? support multiple simultaneous users?
- Is the airspace over land or water?
- Identify known or projected airspace problems that may prevent accomplishing your mission
- What is the maximum straight line segment in your airspace?

3.2.B Airfield and Facility Characteristics

- Provide a brief description of your airfield and support facilities, to include the following: number and azimuth of runways, elevation, runway length (excluding overrun), overrun length, terminal and/or landing aids, arresting cable (yes/no, type), % of days weather exceeds minimums, average visibility, ramp area (Sq Ft), construction material (r/w and ramps) and load capability, hangar space, other parameters deemed appropriate.
- How close and how many emergency runways or airfields are in your area of operation?
- Where is your airfield situated relative to working areas (airspace) for supporting test operations?
- What makes your airfield unique, or at least very well suited, for supporting test operations?
- Is there a size, weight, maintenance or mission limitation that would effect test operations? If so, describe the limitation(s).
- Including hangers and ramps space, how many fighter size aircraft could you support? multi-engine large aircraft?
- Is the facility or installation capable of supporting operational forces?
- Is the facility or installation equipped to support secure operations? To what level of classification?
- If there are any capital improvements underway or programmed in an approved FYDP, that would materially affect any of your answers, please so note and explain.

3.2.C Test Operations

- What types of fixed wing air vehicle testing can be supported? (e.g. performance, handling qualities, fatigue life, static, wheels and brakes, physical integration with external stores or avionics)
- Do ground support facilities exist for pre-flight checkout or rehearsal of test missions?
-What kinds and numbers of aircraft can be supported? What sorts of missions (e.g. air-to-air, air-to-ground, refueling, etc) can be flown within local airspace? Within sortie range?
- What is the maximum number of simultaneous missions you can support that require telemetry?
- What is the largest number of simultaneous test missions you have supported in your airspace?
-Identify the number, types, owner of aircraft at your installation.

-What is the average number of flying days available per year for flight test? Provide historical average from the past 10 years.
- What percentage of the time are your test operations restricted due to weather? Identify if this is a random or seasonal occurrence and explain.
- Are there any limitations on the use of your airspace? If so, what?

3.2.D Geographic features (including climatic)

- Describe the topography and ground cover/vegetation lying under available airspace within your test area of operations (include nap of the earth capability).
- Describe climatic conditions?
- Are there features of the local geology or soil conditions that enhance or inhibit any types of test?
- Did you have to go to other geographical locations to satisfy test requirements? yes/no and explain. If yes, provide as a percent of overall workload per year for the past 8 years.
- What is the average number of days per year the temperature is below 32 degrees F? Between 32 and 90 degrees? Above 90 degrees?
- What is the average number of days per year the relative humidity is below 25%? Between 26 and 75 %? Above 76%?
- What is the number of test missions per year (1985 - 1993) cancelled due to weather?
- What is the number of test days per year (1985 - 1993) cancelled due to weather?
- What is the number od days per year the visibility is less than 1 mile? Between 1 and 3 miles? greater than 3 miles?

3.2.E Specialized features (e.g.,. Launch, jumps, etc.)

- Do specialized facilities exist? (e.g. Aerial delivery load build-up facilities, parachute drying towers/packing facilities; paratroop support facilities; specialized fuel storage and delivery systems; mission planning facilities; corrosion control, painting, washing facilities; specialized maintenance facilities such as avionics intermediate shops, etc.),

3.3 Electronic Combat--<u>Measures of Merit</u>

This category includes the testing of electronic combat systems and electronic combat sub-systems that are normally integrated into other weapon systems. It includes the testing of systems or subsystems that have as their primary mission threat warning, testing of systems that provide countermeasures in the RF spectrum against radars and other RF sensors, systems that provide countermeasures that are used against sensors in the electro-optical or infrared spectrum as well as testing of electronic and C3 countermeasures.

Threat Environment
- What is the number of simultaneous threats simulated?
- How many simultaneous threats can be simulated? What type? (e.g. AI, AAA, SAM, etc) What is maximum signal density? Average density? What power level? What band? Radiated or injected?

- Are the threat models validated? by whom?
- Open loop? Reactive? Closed loop?
- What is the threat representation (fidelity) and density?
    - Are you capable of simulating land threats? Sea threats? Combined land/sea threats? If so, describe.
- What geographic dispersion can be simulated?
    -Threat lay down?
    -Representative distance?
- Are the threats moveable (i.e.dynamic) within a test scenario? relocatable to new scenarios?
- Is the facility interlinked with off-site threats? How linked?
- Is there a limit on simultaneous users?

Test Article Support
- Is there a size, weight or missions limitation on Test Operations the facility or installation can support?
- Identify the limits and whether there are measures that could remove them.
- What is the number of simultaneous countermeasures that can be evaluated?
- What range of spectra can be tested and evaluated?
- What are the available spectra?
- Does a Scene generation capability exist?

3. **Armaments / Weapons**

This category of testing includes the testing of the weapons portion of a weapon system. In those cases where the weapon system is composed almost exclusively of the weapon, it may include system-level testing. In other cases, it addresses just the weapon subsystem, while the testing of the weapon system s vehicle is in another category.

a <u>Directed Energy</u>

This category includes all testing of types of directed energy weapons.

<u>Measures of Merit</u>

- <u>What directed energy weapon systems do you currently test?</u>
- Describe the power source(s) you have available.
- What are your maximum range dimensions?

b. <u>Rocket / Missile / Bomb Systems</u>

This category includes the testing of all types of rocket, missile and bomb systems that are components of a larger weapon system. This includes testing of air-to-air, air-to-surface, and surface-to-air missiles.

<u>Measures of Merit</u>
Airspace (Sq miles and altitude)

[Label this the same as under air vehicles (Available airspace) and use the same questions. Consider moving this to overarching since air vehicle, EC, and armaments/weapons flight tests all need airspace. The evaluation criteria (yardsticks) may change, but the basic data should be the same.]
-What public airspace have you used for overflight of weapons systems in the past? What was the nature of those tests? Do you anticipate being able to use that same public airspace for similar tests in the future?

Ground space
-What is the area in square miles of the land and water space which you can use to conduct tests of live rocket, missile, or bomb systems?
-How many separate and distinct land and water test areas did you use in FY93 to conduct tests of live weapons? List them and the size of each in acres.
- What are the maximum ranges (nautical miles) you can test, by type weapon?

Supersonic Corridors
[Use the same questions as under air vehicles (Supersonic), except instruct the questionnaire respondent to answer the questions twice - once for tests operations involving live rockets, missiles, or bombs, then again for test operations involving inert rockets, missiles, or bombs.]

Safety Footprints
-For both your land and water ranges, how many test missions were scheduled in FY92 and FY93 that were required to use safety footprints comparable to those required for the following types of weapons:

--Unguided 2000 pound-class ballistic weapon
---live?
---inert?
--Guided weapon (e.g., GBU-24 class)
---live?
---inert?
--Stand-off weapon (e.g., AGM-130 class)
---live?
---inert?
--Short-range missile (e.g., AIM-9)
---below 5000 feet MSL
----with Flight Termination System (FTS)?
----without FTS?
---between 5000 and 20,000 feet MSL
----with FTS?
----without FTS?
---above 20,000 feet MSL
----with FTS?
----without FTS?
--Long-range missile (e.g., AIM-120)
same breakout as for short-range missile.

If no missions were scheduled in a category, give the reason(s). Were any scheduled missions cancelled before the mission, or terminated/aborted during the mission because of encroachments into the safety footprint?

Engine (airbreathing and non-airbreathing) and Rocket Motor Tests
-Do you conduct ground tests of engines (airbreathing and non-airbreathing) and rocket motors?
-If so, what is the maximum thrust that you can accommodate in your facility?
-What is the maximum turnaround time between firings?
-What is the minimum turn-around time between engine installations?

Limitations

[After the limitation-type questions have been developed under Air Vehicles, reword and adopt here as appropriate.]

-How many test missions did you conduct using your open-air ranges in FY92 and FY93 of:

--rockets?
--missiles? , and
--bombs?

Geographic features (including climatic)

[Use the same questions as in Air Vehicle under geographic features (including climatic). Consider moving this to overarching since these data are relevant to air vehicles, EC, and armament/weapons.]

c. Air Armaments

This category includes the testing of air armament systems including gun, ammunition movement systems.

Measures of Merit
Maximum firing range
Maximum power source
Limitations
Maximum ordinate

L

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, March 29, 1994

Minutes

The eleventh meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation convened at 0900. Mr. Lee Frame and Mr. John Burt chaired the meeting. A list of attendees is attached.

The Group reviewed and approved the March 15 and March 22 meeting minutes.

The Group then received feedback from the March 15 Steering Group meeting. Significant items included SecDef's approval of existing selection criteria, Military Services will certify data through their chain of command, guidance packages will be sent to Military Services and Defense Agencies by the chairpersons of the Joint Cross-Service Groups, and that the Steering Group was concerned with the T&E intent of sending data calls to all installations capable of performing T&E work.

Extensive discussion ensued on the last item from the Steering Group feedback. The Group agreed with the intent of the Steering Group and agreed to limit the data calls to those installations with cross-service potential. The definition will be reworked to incorporate this intent prior sending guidance to the Review Group for approval on March 30.

The Group then discussed issues the Air Force representative had at the Steering Group meeting with relation to encroachment questions. The Group agreed to remediate this concern before the Review Group meeting.

The Group then established 1630 on March 29 as the deadline for making the aforementioned changes.

The Group further stipulated approval of the package as written noting the changes agreed to in this meeting.

The Laboratory Joint Cross-Service Group representative provided a brief synopsis of their draft guidance.

The next topic discussed was the need for drafting weights for the data call questions. The Group agreed that each Service will begin assigning weights and at a later meeting compare the results and mediate the differences.

The meeting adjourned at 1000 hrs.

Approved: L H Frame
Lee Frame
Co-Chairman

John Burt
Co-Chairman

Attachment

BRAC 95

Joint Cross-Service Group on Test & Evaluation

March 29, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Burt, Co-Chair
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Doug Nation, Air Force
Mr. Parker Horner, Air Force
Mr. Joe Dowden, Air Force
Mr. Dan Stewart, Air Force
Col Rob Bongiovi, Air Force
Lt Col George London, Air Force
Mr. Jere Brinkley, Air Force
Mr. Walt Hollis, Army
Mr. Gary Holloway, Army
Mr. Tom Roller, Army
Mr. Gerald Schiefer, Navy
CAPT Dave Rose, Navy
Ms. Kathleen Ruemmele, BMDO
Mr. Mark Flohr, OSD DNA
Mr. Mike McAndrew, ODASD(ER&BRAC) BCU
Mr. Jim Thomas, OSD OT&E
Mr. Joe Moore, OSD OT&E
Mr. Irv Boyles, OSD T&E
Mr. Rod Rodriguez, DISA
Mr. Don Bortner, OSD Comptroller
Mr. Frank Lewis, OSD PA&E
MAJ Robin Pope, OSD DR&E
Mr. Tom Wright, DoD IG

The T&E Joint Cross-Service Group Meeting

9:00a.m., Tuesday, 29 Mar.,1994

Room 1C730

- Review Minutes (Before Meeting Convenes)
- Opening Remarks
- Outcome of March 28 Steering Group Meeting
- T&E Sub-Group Update:
  - Where are we?
    - Data package completed for presentation to Review Group
  - Concerns/issues
    - JCSG Schedule to complete BRAC 95? (Milestones after 31 March)
- Laboratory Group Update
- Wrap-Up/ Action Items

M

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, May 24, 1994

Minutes

1. The twelfth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation convened at 0900. Mr. Lee Frame and Mr. John Burt chaired the meeting. The agenda, a list of attendees, and the list of discussion topics are enclosed.

2. Workload Forecasting

a. Questions have come up concerning forecasting workload beyond FY99 since the FY95 FYDP only projects through FY99. The JCSWG agreed to determine a solution and get back to the JCSG with a recommendation.

b. Some facility managers are having difficulty identifying Program Elements in the FY95 FYDP that might bring workload to their facility. The Services agreed to provide assistance to the facility managers.

3. The JCSG expressed concern about working the analysis from the bottom up in the absence of an overall analysis plan. They instructed the JCSWG to continue to develop an analysis methodology and adjust when guidance is received.

4. The JCSG instructed the JCSWG to continue working on functional values. They should, if possible, be compatible with the military values assigned by the Services to the host installations.

5. A discussion followed about the need to specifically identify those personnel who would be involved in analyzing data from the Data Call. The JCSG instructed the JSCWG to prepare the list so those personnel could be identified as BRAC personnel to the Service BRAC offices.

6. The JCSWG was also instructed to prepare an audit of actions taken to date according to the BRAC requirements.

7. The JCSWG agreed to continue to work and report progress on the following items at the next JCSG meeting.

a. Scoring and weighting the Data Call questions.

b. Finalizing the workload and capacity determination methodologies.

c. Establish functional values and consider compatibility with military value.

d. Establish capacity reduction targets.

8. There being no other items for discussion, the meeting adjourned at 1000.

Approved: Lee Frame
Co-Chairman

John Burt
Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

May 24, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Burt, Co-Chair
Mr. John Bolino, Co-Study Team Leader
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Mr. Parker Horner, Air Force
Mr. Dan Stewart, Air Force
Mr. John Gehrig, Army
Mr. Gary Holloway, Army
Mr. Tom Roller, Army
MAJ Essex Fowlkes, Army
Mr. Gerald Schiefer, Navy
CAPT Dave Rose, Navy
CDR Mark Samuels, Navy
MAJ Tracy Bailey, OSD BMDO
Mr. Tom Kennedy, OSD DNA
Mr. Mark Flohr, OSD DNA
Mr. Irv Boyles, OSD T&E
LTC L.P. Filipkowski, DISA
Ms. Jeanne Karstens, OSD Comptroller
Mr. David Vincent, DoD IG

T&E Joint Cross-Service Group Meeting
0900, Tuesday, 24 May 1994
Conference Room, 1C730, Pentagon

Agenda

- *Opening Remarks*
- *Progress Report*
- *Labs Group and Depot Group Updates*
- *Where are We? / Milestones*
- *Near Term Objectives*
- *Concerns / Issues*
- *Action Items / Wrap Up*

T&E JCSWG STATUS

ACTIVITY

MET 3 TIMES DURING THE PERIOD FROM 1 APRIL - PRESENT

- DISCUSSED WORKLOAD FORECASTING

STATUS - OPEN

- DISCUSSED QUESTION DEVELOPMENT TO SCORE DATA

  -- EACH SERVICE AGREED TO CONTINUE WRITING DRAFT QUESTIONS

STATUS - OPEN

FUTURE ACTIVITIES

- NEXT MEETING, TUESDAY, 24 MAY, 1300

  -- SHARE VIEWS ON GROUND RULES FOR ESTABLISHING WEIGHTS TO QUESTIONS

  -- CLARIFY ANY ISSUES ASSOCIATED WITH CAPACITY

  -- DISCUSS METHODOLOGY FOR EXCESS CAPACITY REDUCTION TARGETS RECOMMENDATION TO THE JCSG

  -- DISCUSS METHODOLOGY FOR DETERMINING " T&E" FUNCTIONAL VALUE

- WE WILL CONTINUE TO WORK ISSUES THAT DO NOT REQUIRE A RULING ON HOW JOINT ANALYSIS IS ACCOMPLISHED

N

BRAC 95

Joint Cross-Service Group on Test & Evaluation

Tuesday, May 31, 1994

Minutes

The thirteenth meeting of the BRAC 95 Joint Cross-Service Group on Test and Evaluation convened at 0900. Mr. Lee Frame and Mr. John Burt chaired the meeting. The agenda, a list of attendees, and handouts are attached.

The Joint Cross-Service Group Internal Control Plan was distributed to familiarize them with the sensitivity and controls of BRAC 95.

Mr. Doug Hansen, Director, Base Closure and Utilization, briefed the Group on the status of the draft Joint Cross-Service Analysis process. Discussion ensued on the use of an optimization model to help the cross-service groups generate alternatives for cross-servicing opportunities. There was concern that this model would determine what to keep or what to recommend for closure. Mr. Hansen pointed out this model was simply one of the tools to be used in conjunction with military judgement to identify cross-service opportunities. It was mentioned the cross-service analysis process needs to be in place before Services begin sharing data with the cross-service groups.

The subgroup then presented the Group with a status of tasks they were assigned in previous meeting(s). The two tasks in question are developing excess capacity methodology and projected workload methodology. The subgroup splintered off into two other groups to approach these issues. The sub-subgroup on excess capacity analysis has met and will be able to recommend alternatives at the next meeting of the Group. The sub-subgroup on projected workload will meet later in the week. The Group reminded the subgroup that if there is an impasse, not to dwell on it but develop recommendations for the Group's resolution.

The subgroup also reported that it has completed a review of the minutes held in the OSD Base Closure and Utilization office to determine if there are outstanding issues to resolve. A formal report will be presented at the next Joint Cross-Service Group meeting.

The Co-Chairs expressed concern over membership listings. They requested each Service to provide a listing of their members to all groups (Joint Cross-Service, subgroup and both sub-subgroups) for formal ratification and inclusion in meeting minutes.

The final discussion related to the approach on functional value and how to ascertain if these functional values can be best rolled up by functional area, facility categorization, or even at a lower level. The Group asked the subgroups to keep this in mind as they develop their methodologies.

There being no other items for discussion, the meeting adjourned at 1025.

Approved: _____
Lee Frame
Co-Chairman

_____
John Burt
Co-Chairman

Attachments

BRAC 95

Joint Cross-Service Group on Test & Evaluation

May 31, 1994

List of Attendees

Mr. Lee Frame, Co-Chair
Mr. John Burt, Co-Chair
Mr. Nick Toomer, Co-Study Team Leader
LTG (Ret) Howard Leaf, Air Force
Lt Col George London, Air Force
Mr. John Gehrig, Army
Mr. Gary Holloway, Army
Mr. Tom Roller, Army
Mr. Don DeYoung, Navy
CDR Mark Samuels, Navy
Ms. Kathleen Ruemmele, BMDO
Mr. Doug Hansen, ODASD(ER&BRAC) BCU
Mr. Mike McAndrew ODASD(ER&BRAC) BCU
Mr. Mark Flohr, OSD DNA
Mr. Joe Moore, OSD OT&E
Mr. Irv Boyles, OSD T&E
Mr. Dave Vincent, DoD IG

T&E Joint Cross-Service Group Meeting
0900, Tuesday, 31 May 1994
Conference Room, 1C730, Pentagon

Agenda

- *Opening Remarks*
- *Working Group Report*
- *Joint Cross-Service Analysis Process--report by Doug Hansen*
- *Action Items / Wrap Up*

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
3300 DEFENSE PENTAGON
WASHINGTON, DC 20301-3300

ECONOMIC SECURITY

13 APR 1994

MEMORANDUM FOR CHAIRPERSONS, BRAC 95 JOINT CROSS-SERVICE GROUPS

SUBJECT: Internal Control Plan for Managing the Identification of DoD Cross-Service Opportunities as Part of the DoD 1995 Base Realignment and Closure Process

The attached Internal Control Plan contains a description of the management controls that will guide and regulate Department of Defense use of Joint Cross-Service Groups as part of the 1995 Base Realignment and Closure (BRAC-95) process. The management controls described in this Internal Control Plan provide a basis for monitoring the BRAC-95 process and complying with the statutory requirements set forth in the Defense Base Closure and Realignment Act of 1990 (Public Law 101-510), as amended by Public Law 102-190 and Public Law 103-160, and policy guidance issued by the Deputy Secretary of Defense on 7 January 1994.

This Internal Control Plan is effective immediately and may be supplemented, as necessary, to enhance management control. Joint Cross-Service Group supplementary guidance is subject to approval by the Chairman of the BRAC 95 Steering Group.

Robert E. Bayer
Acting Chairman
BRAC 95 Steering Group

Attachment

Internal Control Plan for Managing the Identification of DoD Cross-Service Opportunities as Part of the DoD 1995 Base Realignment and Closure Process (BRAC-95)

Background

With certain exceptions, the exclusive procedures by which the Secretary of Defense (SECDEF) may pursue realignment or closure of military installations inside the United States are contained in Part A, Title XXIX of Public Law 101-510, the Defense Base Closure and Realignment Act of 1990; as amended by Public Law 102-190 and Public Law 103-160; hereafter referred to as the Base Closure Act. The Base Closure Act also includes a provision for the President to appoint independent Base Closure and Realignment Commissions to review the Secretary of Defense's recommendations in calendar years 1991, 1993, and 1995.

The Deputy Secretary of Defense (DEPSECDEF), in a memorandum dated 7 January 1994, set forth guidance, policy, procedures, authorities and responsibilities for recommending bases for realignment or closure for submission to the 1995 Defense Base Closure and Realignment Commission. The DEPSECDEF guidance included a requirement for the establishment of BRAC-95 Joint Cross-Service Groups in six areas with significant potential for cross-service impacts in BRAC-95.

Five of the Joint Cross-Service Groups are functional areas encompassing Depot Maintenance, Test and Evaluation, Laboratories, Military Treatment Facilities including Graduate Medical Education, and Undergraduate Pilot Training. These functional groups should, where operationally and cost effective, strive to: retain in only one Service militarily unique capabilities used by two or more Services; consolidate workload across the Services to reduce capacity; and assign operational units from more than one Service to a single base. A sixth Joint Cross-Service Group was formed as a Joint Economic Impact Group to establish guidelines for measuring economic impacts. The five functional area joint cross-service groups have been tasked by the DEPSECDEF to:

- determine the common support functions and bases to be addressed by each cross-service group:
- establish the guidelines, standards, assumptions, measures of merit, data elements and milestone schedules for DoD Component conduct of cross-service analyses of common support functions;
- oversee DoD Component cross-service analyses of these common support functions;
- identify necessary outsourcing policies and make recommendations regarding those policies;

- review excess capacity analyses;
- develop closure or realignment alternatives and numerical excess reduction targets for consideration in such analyses; and
- analyze cross-service tradeoffs.

The economic impact joint cross-service group has been tasked by the DEPSECDEF to:

- establish the guidelines for measuring economic impact and, if practicable, cumulative economic impact; to analyze DoD Component recommendations under those guidelines; and
- develop a process for analyzing alternative closures or realignments necessitated by cumulative economic impact considerations, if necessary.

The DEPSECDEF directed the BRAC-95 Joint Cross-Service Groups to complete the above analytical design tasks and issue guidance to the DoD Components, after review by the BRAC-95 Review Group, no later than 31 March 1994. The BRAC-95 Review Group reviewed and approved the guidance on March 30, 1994.

Purpose

The primary purpose of this Internal Control Plan is to provide a consistent set of management controls for all Joint Cross-Service Groups and to meet the requirements established by the DEPSECDEF regarding the DoD Component cross-service analyses of all assets within each category, as annunciated in his Memorandum of 7 January 1994. More specifically, the DEPSECDEF directed the Joint Cross-Service Groups to develop and implement an Internal Control Plan to ensure the accuracy of data collection for conducting base realignment or closure assessments. At a minimum this Internal Control Plan includes:

- Uniform guidance defining data and information requirements and sources;
- Systems for verifying the accuracy of data and information at all levels of command;
- Documentation justifying changes made to data received from subordinate commands;
- Procedures to check the accuracy of the analyses made from the data and information; and
- Assessment by auditors of the adequacy of this Internal Control Plan.

ddition to the above requirements, DEPSECDEF requires that the Internal Control i porate certification procedures required by the Base Closure Acts. The Joint Cross-ce Groups will not be gathering original data and information , but will specify the data nformation required to be gathered by Military Departments and Defense Agencies. efore, all data and information provided to the Joint Cross-Service Groups for purposes of sis and decision making are required to be certified as accurate and complete by the ary Departments and Defense Agencies in accordance with their respective BRAC-95 nal Control Plans.

Responsibilities

The BRAC-95 Steering Group will oversee implementation and adherence to this nal Control Plan by the Joint Cross-Service Groups. The basic goal of this Internal rol Plan is to ensure consistency in the data gathered and used, application of selection ria, methodology and reports to the SECDEF and subsequently to the 1995 Base Closure Realignment Commission.

The Secretaries of the Military Departments, the OSD Secretariats, and the Directors of Defense Agencies are responsible for providing staff resources to the Joint Cross-Service ps. The Chairs of the individual Joint Cross-Service Groups are responsible for ensuring the members of the Groups are fully aware of the management controls presented in this nal Control Plan. Team members are responsible for implementing and adhering to the rols while also reporting to the Chairs any noted control violations or weaknesses identified e collection and analysis of data. The Chairs of the Joint Cross-Service Groups are d to implement further guidance to control the functioning of their respective Groups way as to meet the intent of this Internal Control Plan.

Internal Control Mechanisms

The objective of the internal control mechanisms to be employed by the Joint Cross-ice Groups is to ensure the accuracy, completeness, and integrity of the information upon h the SECDEF recommendations for closures and realignments will be based. The two cipal mechanisms are organization and documentation.

anization Controls.

Under the oversight and guidance of the DEPSECDEF, there are four ps/organizations within the DoD which have primary responsibility for assisting the DEF to identify cross-service asset sharing opportunities. To ensure the integrity of the ction process, the four groups/organizations are to be separated by distinct functional ndaries and levels of decision making authority. The Chair and membership for each Joint ss-Service Group have already been determined and assigned by the DEPSECDEF. ividual members to the Groups have also been appointed by the OSD Secretariats, the retaries of the Military Departments and the Directors of the Defense Agencies.

T&E JCSG Sub-Group Status

- Met 5/24/94 and established two Sub-Sub-Groups to determine:
  - Excess Capacity Methodology (5/26/94)
  - Projected Workload Methodology (TBD)
  - Completness of minutes (5/27/94)
- Also Discussed:
  - Approach for determining Functional Values
  - Reduction Targets
- Next mtg scheduled for 6/2/94 @ 1300