ANNEX H (BRS COMMUNICATIONS & INFORMATION MANAGEMENT) to LOGCAP CONTINGENCY SUPPORT PLAN

REFERENCES. See ANNEX N, Appendix 4.

TIME ZONE USED THROUGHOUT THE PLAN. Iraq.

TASK ORGANIZATION. See ANNEX A.

1. **SITUATION.** See Base PLAN.

2. **MISSION.** See Base PLAN.

3. **EXECUTION.** See Base PLAN.

    a. **Scheme of Signal Support Operations.**

        1) **General.** BRS will establish communications within the Iraq area of operations (AOR) and connectivity to the BRS LOGCAP Office in Houston, Texas. BRS will expand the communications network to include interface with U.S. military communications systems as systems become operable.

        2) **Advance Team and Assesment Team Communication.** The Advance Party will deploy with sufficient communication equipment to establish a basic system and expand the system as necessary. As assessment teams and the base camps ares established, internal communications will be via telephone and handheld radios.

            a) BRS will deploy sufficient satellite terminals and satellite phones to provide links between the Advance Party, the Assessment Teams and the Houston Office. Key members of the Advance Party will deploy with laptop computers programmed for remote dial in data capability via a Nera M4 INMARSAT terminal. Iridium Satellite phone will be used for voice communication to external sites.

            b) Advance team will deploy with one 150 watt H.F. SSB base radio for communicating between assessment teams. One VHF 110 repeater, one VHF mobile per base camp vehicle and one 5 watt VHF handheld per advance team member for base camp area communications will be utilized. Repeater antenna will be mounted on highest point in area for best possible communication pattern, if need be antenna masts and multiple repeaters will be installed.

            c) Assessment teams will deploy with one 150 watt H.F. SSB mobile in one vehicle per team for long range communication back to base camps. Each vechile in all teams will have one 45 watt VHF mobile and each person in the team will have one 5 watt VHF handheld for on acessment site communication needs.

        3) **Concept of Communication.** The preferred communication approach is to use the Halliburton Satellite Communications Package for communication from Iraq to BRS offices in Houston, Texas, and Arlington, Virginia, and existing commercial communication means to the maximum extent possible for communications in Host Nation. BRS will assess the

Host Nation capabilities and work to obtain commercial communication services without creating a hardship for the Host Nation.

a) Initial communications will be established from Iraq to CONUS using satellite communications (Motorola Iridium units). Connectivity within and around the base camp will be via repeater, High Frequency (HF) radio or satellite phone. Internal communications within the camps will be by portable (handheld) transceivers operating in the Very High Frequency (VHF). Once established at the event site, BRS will call forward, the Halliburton Satellite Communication Package, see Appendix 1 to this Annex.

b) When available, BRS will request use of U.S. Government provided communications facilities (i.e. DSN phone lines, NIPR, SIPR LANs) for communication between BRS support elements.

c) The BRS Project Manager or Communications Supervisor will coordinate with the EVENT Force Staff to obtain a listing of planned GFE and GFM available (if any) for use during the EVENT and determine if additional equipment is required in order to accomplish the mission. Requests for additional equipment will be forwarded to the PCO/ACO for authorization to purchase.

d) Communications will be in an unsecure mode unless communication via encrypted means is required. Initial secure communications will be coordinated with and provided by U.S. Army Corps of Engineers, Southwest Division (USACE SWD). If sustained secured communications are required, BRS will request that the PCO/ACO provide encryption devices or authorize BRS to purchase the required equipment and software.

e) The BRS Project Manager or Communications Supervisor will coordinate with U.S. military and Host Nation agencies, as appropriate, to obtain required radio frequencies.

f) The BRS's Communication Plan specifies communications hardware, software, video equipment, power output and frequencies by site (when available) required to establish and maintain effective communications connectivity. It also identifies required communications stations and their anticipated locations, as well as a Networking Plan for in-theater communications and connectivity.

(g) BRS will determine the availability of equipment and material-such as telephone cable, wire, and antennas-and will procure supplies and equipment from the closest feasible location to Iraq. Sufficient numbers of communications personnel will be activated to perform all communications tasks.

4) **Systems and Procedures.** BRS will use Host Nation existing communications if feasible and affordable. If tasked, BRS will operate radios in a secure mode and will require encryption devices.

a) Upon Notice to Proceed (NTP), a communications architecture will be activated based on this plan and a flyaway communications package and equipment list will be finalized.

b) Prior to or during the initial stages of deployment, BRS will gather data relevant to Iraq. The data will include:

      (1) Approving agency for radio frequencies

      (2) Existing communications infrastructure

      (3) Location of communications facilities

      (4) Local businesses that can assist or provide services and support

      (5) Vulnerability of potential Host Nation communications facilities and equipment to destruction by sabotage, severe weather or other conditions

      (6) Frequencies available for use and who will determine

      (7) Frequency plan of U.S. Government (to prevent frequency interference)

      (8) Type and frequency range of Government Furnished Equipment (GFE)

      (9) Expected density of communications equipment

      (10) Potential sites to locate communication stations

      (11) Lines of communication (for example, roads, rivers and airports) to transport equipment to installation sites

  c) Additionally, BRS will determine the availability and license costs (if any) of existing communications nodes and systems in the Host Nation that are available for use. The Communications Supervisor will evaluate the effect the climate, weather, road networks and other considerations will have an effect on communications.

  d) The Communications Supervisor will establish coordination procedures with the CENTCOM C/J-6 and will build a frequency matrix for Iraq outlining use of frequencies for High Frequency (HF) radio, Very High Frequency (VHF) Radio, Ultra High Frequency (UHF) radio and repeater frequencies. BRS will ensure the plan includes procedures to obtain frequency clearances from the Host Nation, regional governments, or the U.S. Government. The plan will include diagrams of communications connectivity for theater communications to CONUS. BRS will deploy sufficient satellite terminals to link the Advance Party with the Houston Office.

5) Sustainment Communications. If the Government communication system has the capacity, and the PCO/ACO approves, BRS will use Government-installed satellite and cellular telephone systems for use between LOGCAP elements. BRS will also ensure that communications to CONUS, a secure telephone, a FAX machine, and telephone are available for use by PCO/ACO personnel 24 hours a day, seven days a week.

b. Implied Tasks. Signal services are performed based upon priority. Emergency services are justified based upon loss or interruption of critical communication connectivity.

c. **Tasks to BRS Elements.** Signal Services will provide Engineer Section with input on power requirements for antennas/repeaters and Radio Frequency (RF) sensor locations that support tracking of intransit cargo.

d. **Service Support to Supported BRS Elements.**

(1) BRS will ensure that all communication/signal equipment is selected for purchase based upon the satisfaction of technical performance requirements and minimized life cycle ownership costs.

(2) A BRS Communication Specialist will coordinate access to frequencies and the installation of initial communications capabilities upon arrival in the EVENT area. The Communication Specialist will assume responsibility for signal services during the arrival of the main body of Contractor personnel until Signal Service technicians are hired and/or subcontracted. Commercial communication and signal services subcontractors, if available, may be the preferred choice to support the installation of cable, wire and antennas.

(3) Handheld VHF radios will be the primary mode of communication among supervisors and working party personnel during the build up period.

(4) If reliable commercial or military telephone lines are not available, at least one dedicated telephone line (via satellite) will be established to support communication for requisitions and critical logistics issues back to Houston.

(5) BRS can provide Information Management services to include:

a) Non-tactical Automation.

b) Commercial communication systems for information management purposes.

c) Printing and publishing operations/capabilities.

d) Records management.

e) Video operations management (i.e., video tele-conferencing (VTC) capabilities).

(6) Local national/host nation resources, both hardware and personnel, will be utilized to the extent that proves most advantageous to the government in order to provide the best flexibility and capability at the lowest reasonable cost and security risk.

(7) The skills retained within the Signal Services Office will include sufficient journeyman level technicians and skilled supervision to provide responsive support to the Forward Support Area Base Camps.

4. **SERVICE SUPPORT.** See Base PLAN.

5. **COMMAND AND SIGNAL.**

a. **Command.** See Base PLAN and ANNEX A.

b. **Signal.**

1) **Telephone Communications.** Host Nation telephone services, if available, will be used to the maximum extent possible. Telephone service may require extending drop off points and cable pairs to the base camp. Key members of the Advance Party will deploy with laptop computers programmed for remote data capability.

2) **Radio Communications.** Portable (handheld) radios operating in the VHF range will be utilized for internal communications within and in close proximity to the base camp and all EVENT Support Areas. The Communications Supervisor will program and reprogram BRS and Team LOGCAP radios, as required. If required, BRS will use HF radio to communicate between the Support Areas and designated mobil units.

3) **Repeater Operations.** BRS is prepared to install repeater systems for local communications in the EVENT area. If necessary, BRS will install a system of linked repeaters to provide communications between support areas. BRS is prepared to provide a repeater trunking system for simultaneous communications. If repeaters are required, they will have backup emergency power systems or battery power. If feasible, BRS may lease a repeater site or repeaters. Otherwise, with U.S. Government approval, BRS will procure necessary equipment to establish a repeater site. A local firm may then be hired to install and maintain the equipment and antennas, or BRS may self perform these functions. If BRS is requested to procure repeater equipment, it will buy from the General Services Administrator (GSA) contract whenever possible.

4) **Satellite Communications.** The advance party will immediately begin staging the installation of Halliburton 2.4 Meter Dish Satellite Communications Packages to be used for high capacity voice and high capacity data communication from the five EVENT base camps to BRS offices in Houston, Texas, and Arlington, Virginia. Three base camps will operate external telephone and data communications internal communications will be via a 512 meg satellite link to facilitate voice and data. Two base camps will operate external telephone and data communicationsinternal communications will be via 256 meg satellite links to facilitate voice and data.

   a) **Equipment.** Radio Equipment Breakdown

      (1) **H.F. SSB base.** Will consist of one 150 watt mobile radio in a base configuration with power supply, automatic antenna tuner, SSB base antenna, 50' of coax, 40' antenna mast with all necessary hardware for installation.

      (2) **H.F. SSB base.** Will consist of one 150 watt mobile radio installed in a vehicle with a automatic antenna tuner, 96" mobile antenna whip with stainless ball base and all necessary hardware for installation.

      (3) **VHF repeater .** Will consist of one 110 watt repeater with 50' of coax, 40' antenna mast, VHF base antenna, battery backup, and all necessary hardware for installation.

      (4) **VHF base station.** Will consist of one 45 watt mobile radio in a base station configuration with power supply, 50' of coax, 40' antenna mast, VHF base antenna and all necessary hardware for installation.

(5) **VHF mobile.** Will consist of one 45 watt mobile radio installed in each vehicle with one 5db gain antenna and all necessary hardware for installation.

(6) **VHF handheld.** Will consist of one 5 watt handheld radio with antenna, one external speaker microphone, and two high capacity batteries.

(7) **Handheld battery chargers.** Will be of the six battery bank kind and of sufficient number to charge all batteries on the radios.

ACKNOWLEDGE:

(b)(6)

BRS PGM, LOGCAP

OFFICIAL:

(b)(6) BRS D/PGM

Appendix 1   BRS Satellite Communications
Appendix 2   Signal Services

Logistics Civil Augmentation Program (LOGCAP)
CONTINGENCY SUPPORT PLAN

APPENDIX 1 (BRS SATELLITE COMMUNICATIONS) to ANNEX H (COMMUNICATIONS & INFORMATION MANAGEMENT) to LOGCAP CONTINGENCY SUPPORT PLAN

REFERENCES. See ANNEX N, Appendix 4.

TIME ZONE USED THROUGHOUT THE PLAN. Iraq.

TASK ORGANIZATION. See ANNEX A.

1. **SITUATION.** See Base PLAN.

2. **MISSION.** See Base PLAN.

3. **EXECUTION.**

   a. **Scheme of Satellite Support Operations.** In support of the BRS Iraq Team, BRS will use the *HalLink* dedicated satellite support operation. Our experience supporting these types of deployments through the years has shown that one of the critical success factors is the ability to establish communications from Iraq with the customer, the planning office (PMO) and our suppliers and sub-contractors. In this way, our deployed team can convey and receive mission critical data in real time. It is not uncommon to find there is no readily available, reliable telecommunications infrastructure within the AOR. And, while our customer normally has established a controlled military communications infrastructure, the availability of bandwidth that can be spared to the commercial needs of our organization is limited or non-existent.

   The Halliburton companies have extensive experience in the utilization of satellite telecommunications primarily in the Ku-band and limited experience in C-band configurations. *HalLink* is a dedicated satellite support operation consisting of dozens of systems in North America, Latin America, Africa, the Balkans, and within the former Soviet Union as well as off-shore platforms and oceangoing vessels. Our experience includes planning, configuration, deployment, management, tuning, space allocation, licensing and de-commissioning.

   Halliburton operates our own Satellite Network Operations Center (SNOC) in our Houston, TX, facility to allow for around the clock technical support to our deployed teams and operational facilities and to act as the liaison to the satellite segment providers from whom we obtain bandwidth and licensing. These systems allow us to quickly establish full service telecommunications functionality virtually anywhere in the world in a matter of days. We will be limited only by transport, space segment availability and EVENT site country licensing issues.

   This platform affords us flexible, seamless interconnection into our corporate infrastructure or the Internet as a whole. As an integral component of our overall IT infrastructure, users are afforded all the protections and services such as virus scanning, firewall, proxy access to internet, etc. of those on traditional terrestrial links.

   b. **Components.** The components for our standard system include a VertexRSI 2.4m Ku-band antenna, Comtech 550T modem, Cisco 1720 router, Liebert UPS sized to support all components, and Clarent SDM-9400 access unit. We also, as a standard practice, install a Motorola Iridium unit (satellite phone) primarily for use between the site and the Service Center for assistance with deployment/installation issues, or in the rare event of a systems failure, to contact the Service

Center for assistance. The Service Center can also use this connection to dial into the system for diagnostics, maintenance and troubleshooting. This phone can be used in-theater for emergency communications by members of the team, as well.

c. **Installation.** The satellite system is packaged as a turnkey unit. The industry standard quick deploy model is capable of being assembled/disassembled quickly by a two- or three-man team and packaged in rugged transport cases for easy shipment utilizing commercial, charter or military transport. All necessary hardware, software, cables, manuals, training materials for operators, etc. are included. Basic requirements are open space with line of sight capability to the satellite and a ready supply of 110v power.

When the unit arrives at the final destination, it can be quickly assembled, sited, and brought into operation. There are complete, easy-to-follow instructions with each unit for assembly. There are no special tools required and all assembly points, cables and plugs are clearly marked. Depending on location, duration of deployment and environmental conditions, the units can be temporarily or permanently mounted. Complete specifications for hold-downs and foundations are available. HalLink Service Center personnel are always available to discuss the installations and can offer advice regarding securing the system in place.

The addition of a Motorola Iridium unit facilitates real-time access to the Service Center for assistance during installation and alignment. This unit is also configured to allow the Service Center to dial into the unit once it is powered up to perform diagnostics and upgrades.

All traffic connections are directly routed to the satellite earth station in closest proximity to the ultimate destination. For our internal traffic, this site is in the Houston metropolitan area. Terrestrial links from the downlink site carry the traffic to our SNOC where it passes through an external firewall before being linked into our internal backbone.

d. **Implementation.** Once the unit has been properly installed and is transmitting and receiving a signal from the satellite, the data and voice capabilities are brought on-line. The signal passes from the downlink point into our SNOC through a firewall. The data and voice signals are segregated and the data is then automatically aggregated through a router into our backbone network. The voice traffic is dropped into a Nortel telephone switch in our facility where they receive dial tone. The signal is constantly being monitored in our SNOC and any anomalies are quickly noted and service technicians assigned to resolve. The alarm levels assigned to the various metrics on the units usually result in our SNOC personnel running diagnostics and making adjustments before the problem becomes evident to the end users.

e. **Data Connectivity.**

1) **Basic Connectivity.** To establish data connectivity in Iraq, the installer simply plugs an Ethernet cable from the PC into the hub unit on the system. Our standard computer configurations include for a Common Office Environment (COE) which includes for obtaining an IP address utilizing DHCP through our network. The router on this unit is configured to supply IP addresses. When installed in an environment where offices are made available to staff, a single connection is run from the router on the outdoor unit into the office and either the onboard hub is relocated or a separate hub/switch is installed to which all the devices are then connected. This includes for PCs, printers, plotters, servers, etc.

All users on the link are then afforded the same access to systems and resources provided to our employees worldwide – identical to those they have in our permanent offices.

2) Optional Services Available.
Our network architects can establish limited access/limited capability network links to organizations outside the global network. These DMZs facilitate a collaborative work environment where personnel from the linked organizations are able to access systems and applications without violating the integrity of their individual network architectures.

To provide a higher level of security of the link, we have the ability to encrypt the signal at the end site before transmission. The signal can then either be unencrypted at the SNOC before being dropped directly into our global network backbone, or, in the case of DMZ-related traffic destined for a DMZ, the traffic will be passed directly into the DMZ for decryption.

We also can aggregate signal from multiple points of origin at the EVENT site and then separate and distribute the traffic as needed at the SNOC. In this configuration, a portion of the data bandwidth could be routed into a client office and the other portion routed into our office. The two links would be treated as two separate networks.

f. Voice Connectivity.

1) Basic Connectivity. The satellite unit is configured to provide analog voice services. In this configuration, part of the bandwidth is allocated to up to twelve individual voice lines that are routed into a voice switch in our Houston facility that acts as the point of origin for the calls in the public telephone network. These lines are then provided dial tone from this switch – thus they appear to originate within the Houston metropolitan dial plan. Likewise, all calls outside the Houston dial plan are treated as long distance with an origination point of Houston and are billed at the low AT&T rates based on our large volume discount contract. Call detail is captured at the switch and automatically billed to the project. The detail records are provided to the project accounting group to act as backup for invoices, if required.

This unit is also configured with an Option 11 PBX from which site personnel can establish standard telephone capability in the offices, trailers or warehouses. The analog phone lines on the satellite circuit are connected to this PBX and are shared to users on the PBX. Some of these lines can be set aside for dedicated FAX communications if desired. Also, local (EVENT site) analog trunks can be incorporated into the PBX to provide direct local dial access as well. Call detail for long distance service through the Houston switch can be captured and billed direct to the project or long distance dialing can be restricted through this switch. If this choice is made, users can continue to make long distance calls but will require a valid telephone credit card to handle the billing.

2) Optional Services Available. BRS can provide a standard voice mail component that will allow each user of the system to capture messages resulting from missed calls – thus reducing overall costs by eliminating the need to call back.

If a large majority of calls from a site will be directed to a specific region of the world, we have the flexibility to configure all or a portion of the voice lines into a site within the region. In cases where we split the voice lines between multiple drop points, users at the site are able

to choose the point of origin that is most closely situated to the final call destination to obtain the lowest rate.

A typical scenario where this might play out is in the area of EVENT procurement where a portion of the items procured will be sourced in the UK region. EVENT procurement personnel would be able to communicate directly with buyers in our Aberdeen, Scotland facility to procure equipment and materials from that region of the world and also communicate with buyers in our planning office in Houston to acquire equipment or materials from the U.S. All the telephone communications would flow directly through the satellite system to the two sites and be seen as local communications – thus without long distance charges.

4. **SERVICE SUPPORT.** See Base PLAN.

5. **COMMAND AND SIGNAL.** See Base PLAN and this Annex.

ACKNOWLEDGE

(b)(6)

BRS PGM, LOGCAP

OFFICIAL:

(b)(6)   BRS D/PGM

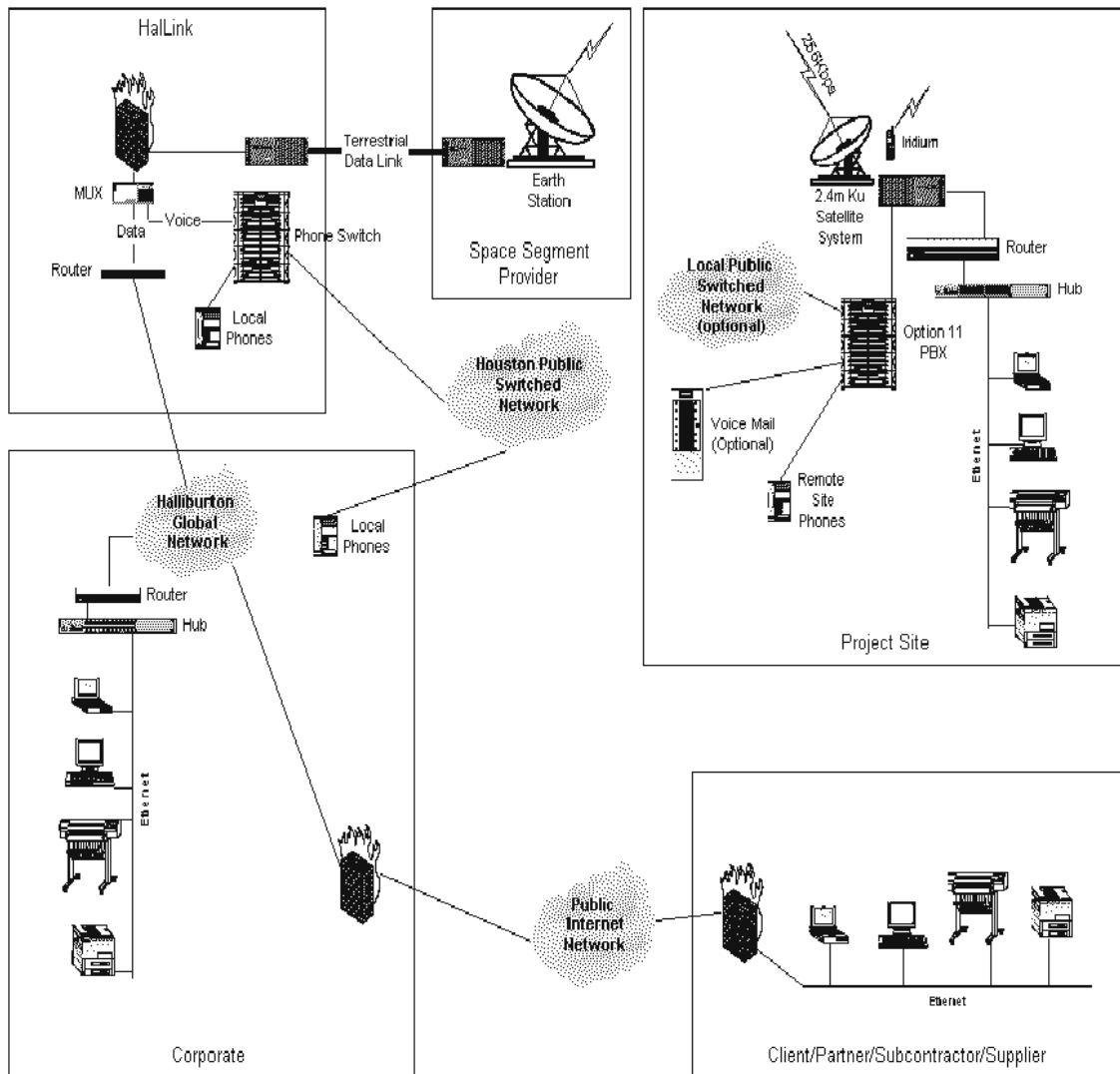TAB A (BRS Satellite Communications Diagram)

TAB A (BRS SATELLITE COMMUNICATIONS DIAGRAM) to APPENDIX 1 (BRS SATELLITE COMMUNICATIONS) to ANNEX H (COMMO/INFO MGT) LOGCAP WMSP

The following diagram illustrates BRS' planned deployment configuration.

TYPICAL INSTALLATION DIAGRAM

Logistics Civil Augmentation Program (LOGCAP)
CONTINGENCY SUPPORT PLAN

APPENDIX 2 (SIGNAL SERVICES) to ANNEX H (COMMO/INFO MGT) to LOGCAP CONTINGECY SUPPORT PLAN

REFERENCES. See ANNEX N, Appendix 4.

TIME ZONE USED THROUGHOUT THE PLAN. Iraq.

TASK ORGANIZATION. See ANNEX A.

1. **SITUATION.** See Base PLAN and ANNEX B (Intelligence).

2. **MISSION.** See Base PLAN.

3. **EXECUTION.**

   a. **Scheme of Signal Support Operations.** .

      1) BRS will ensure that all communication/signal equipment is selected for purchase based upon the satisfaction of technical performance requirements and minimized life cycle ownership costs.

      2) A BRS Communication Specialist will coordinate access to frequencies and the installation of initial communications capabilities upon arrival in Iraq. The Communication Specialist will assume responsibility for signal services during the arrival of the main body of contractor personnel until Signal Service technicians are hired and/or subcontracted. Commercial communication and signal services subcontractors, if available, will be the preferred choice to support the installation of cable, wire and antennas.

      3) Hand held telephones or radios will be the primary mode of communication among supervisors and working party personnel during the build up period.

      4) If reliable commercial or military telephone lines are not available, at least one dedicated telephone line (via satellite) will be established to support communication for requisitions and critical logistics issues.

      5) The skills retained within the Signal Services Office will include sufficient journeyman level technicians and skilled supervision to provide responsive support to the all base camps.

   b. **Implied Tasks.** Signal services are performed based upon priority. Emergency services are justified based upon loss or interruption of critical communication connectivity.

   c. **Tasks to BRS Elements.** Signal Services will provide Engineer Section with input on power requirements for antennas/repeaters and Radio Frequency (RF) sensor locations that support tracking of in transit cargo.

4. **MATERIAL AND SERVICES.** See Base PLAN and ANNEX H. BRS will provide telephone, cable, wire, and/or antenna installation and/or repair, as required.

5.   COMMAND AND SIGNAL. See Base PLAN and ANNEX H.

ACKNOWLEDGE

(b)(6)

BRS PGM, LOGCAP

OFFICIAL:
(b)(6)   BRS D/PM

TAB A   (Telephone Repair)
TAB B   (Cable, Wire & Antenna Installation)
TAB C   (Communication Network Access)

Logistics Civil Augmentation Program (LOGCAP)
CONTINGENCY SUPPORT PLAN

TAB A (TELEPHONE REPAIR) to APPENDIX 2 (SIGNAL SERVICES) to ANNEX H (COMMO/INFO MGT) to LOGCAP CONTINGENCY SUPPORT PLAN

1. **PURPOSE.** To provide information about Telephone Repair operations in support of operations in Iraq.

2. **GENERAL.** BRS, on order of the Procuring Contract Officer (PCO) or designated activity, provides Telephone Repair for BRS personnel supporting operations in Iraq.

3. **SPECIFIC.**

    a. **Scheme of Signal Support Operations.** Repair tasks include the following:

        (1) Perform unit level maintenance on cable and wire communication systems, to include Digital Group Multiplexers (DGM), Remote Multiplexing Combiners (RMC), repeaters, restorers, voltage protection devices, telephones, test stations, intermediate distribution frames, and related equipment.

        (2) Clear and maintain rights of way.

        (3) Test circuits/groups to detect and locate line faults.

        (4) Climb poles, as necessary, and assists in the repair of cable and wire lines.

    b. **Implied Tasks.** Repair Services are performed based upon priority. Emergency services are justified based upon loss or interruption of critical communication connectivity.

    c. **Tasks to BRS elements.** Contracts and Procurement Section should ensure that hand-held telephones/radios required for Iraq Fly Away kits are a mix of purchase and lease and determine special-handling requirements to ensure effective communication during early build up at Iraq sites.

TAB B (CABLE, WIRE & ANTENNA INSTALLATION) to APPENDIX 2 (SIGNAL SERVICES) to ANNEX H (COMMO/INFO MGT) to LOGCAP CONTINGENCY SUPPORT PLAN

1. **PURPOSE.** To provide information about Cable, Wire, and Antenna Installation operations in support of operations in Iraq.

2. **GENERAL.** BRS, on order of the Procuring Contract Officer (PCO) or designated activity, provides cable, wire and antenna installation for BRS personnel supporting operations in Iraq.

3. **SPECIFIC.**

   a. **Scheme of Signal Support Operations.** Installation tasks will include the following:

      (1) Install cable and wire systems, to include Digital Group Multiplexers (DGM), Remote Multiplexing Combiners (RMC), repeaters, voltage protection devices, telephones, test stations, intermediate distribution frames, and related equipment.

      (2) Operate manual and motorized cable construction equipment.

      (3) Mark lanes, dig trenches, and/or climb poles as necessary in the construction of tactical cable and wire lines.

      (4) Install, operate, and perform strapping, restrapping, Preventive Maintenance Checks and Services (PMCS), and unit level maintenance on communication security (COMSEC) devices.

   b. **Implied Tasks.** Services are performed based upon priority. Emergency services are justified based upon loss or interruption of critical communication connectivity.

   c. **Tasks to BRS elements.** Signal Services will coordinate with the Engineer Section on power requirements for antennas/repeaters and locations.

Logistics Civil Augmentation Program (LOGCAP)
CONTINGENCY SUPPORT PLAN

TAB C (COMMUNICATION NETWORK ACCESS) to APPENDIX 2 (SIGNAL SERVICES) to ANNEX H (COMMO/INFO MGT) to LOGCAP CONTINGENCY SUPPORT PLAN

1. **PURPOSE.** To provide information about Communication Network Access operations in support of operations in Iraq.

2. **GENERAL.** BRS, on order of the Procuring Contract Officer (PCO) or designated activity, provides communication network access to BRS personnel supporting operations in Iraq.

3. **SPECIFIC.**

   a. **Scheme of Signal Support Operations.** Network Access tasks include the following:

      1) Provide technical assistance to users in defining their communications requirements.

      2) Integrate signal systems and information networks (Local Area and Wide Area).

      3) Troubleshoot and assist users with the establishment of signal support systems.

      4) Allocate and manage frequencies to optimize communication availability.

      5) Coordinate communication frequencies with military and civilian (Host Nation) communications organizations.

   b. **Security.** BRS relies on the confidentiality, integrity, and availability of its computing, networking, and data resources to meet informational requirements in all areas of its business. BRS Information Technology (IT) Security defines, monitors, implements, and takes corrective action to ensure an appropriate level of information systems security for all automated information handlers (including mainframe computers, mini computers, personal computers, laptops, personal digital assistants (PDAs), word processors, terminals, and network components). BRS IT management will establish procedures for the reporting of information systems security breaches, including suspected violations and/or security compromises. Methods of ensuring data integrity include the following:

      1) All computing devices will be physically protected and kept in a secure environment. Corporate and Client data, whether in printed form, magnetic tape, disk, or other format will be protected from unauthorized disclosure and malicious or accidental abuse.

      2) A Business Continuity and/or Disaster Recovery Plan will be put in place to ensure that BRS can continue to do business should our automated systems become unavailable for an extended period of time.

      3) Connectivity to Halliburton computing devices and networks will be limited to those methods and procedures approved by BRS IT Security. Connectivity to any non-Halliburton network from Halliburton's network and/or computing devices must use authorized methods and appropriate IT security controls.

Security guidance will be provided by the consulting firm Predictive Systems and reference to generally accepted IT business practices and standards such as ISO 17799.

4) Authorized user access to computing devices, networks, data, programs, and/or information databases are controlled to limit access to only necessary resources. Access to the computing system is controlled through assigned user identifications and passwords.

5) Privileges associated with a system access code (e.g., access to only specific online systems) shall be assigned only as required.

6) All computing devices with the capability to log-on to the network/internet will generate a log of user activities that occur on the system. The logs are retained in accordance with BRS data retention policies and protected from accidental and/or intentional modification or destruction.

7) Remote access to the Halliburton networks and resources will be used only when fixed, in-place data communications links are not feasible. When remote access methods are employed, strong (two-factor authentication) security measures will be taken. Only methods authorized by BRS IT Security for remote access to Halliburton computing resources shall be used.

c. **Implied Tasks.** BRS Signal Services will identify power requirements for antennas/repeaters and locations.