

01

Secret

**PLA Air Force Command & PLA Air Force
Logistics Department (Request for Approval)**

Command
Communication [2007]
No. 116

Signed by Yang Guohai
Reviewed by Zhu
Hongda

**Submitting the Project Design Task Plan of the
Construction of Communication and Command-
and-Control System of the Air Force Shanghai
Base Underground Command Post**

General Staff, General Logistics Department:

According to the instruction spirit of General Staff Communication [2007] No. 433 "Assign the First Batch of Battlefield Communication Facilities Construction Projects of 2007", combined with the Air Force's anti-"Taiwan Isolation" emergency combat preparation tasks, and by sorting out the operational requirements of the communication and command-and-control system of the Air Force Shanghai Base

**English translation is for reference only,
please refer to the original Chinese version for any discrepancies**

underground command posts, the construction project design task plan is hereby submitted.

This communication system construction project mainly includes: infrastructure construction such as optical (electrical) transmission, satellite, and short-wave communication, application network construction such as program-controlled (manual) switching and video conference, and other supporting projects including communication power, etc. The command-and-control system construction project mainly includes: integrated wiring, display control and network equipment installation in the command posts. After the above tasks are completed, they can be interconnected with other systems in the region according to the requirements of the integrated command platform to meet the needs of combat command. According to the calculation, the above-mentioned construction projects will require a total construction expense of 29.93 million yuan.

Please give instructions on whether this plan is appropriate.

**English translation is for reference only,
please refer to the original Chinese version for any discrepancies**

Attachment: The Project Design Task Plan of the
Construction of Communication and Command-and-
Control System of the Air Force Shanghai Base
Underground Command Post

PLA Air Force Command &
PLA Air Force Logistics Department

November 3, 2007

Attachment

The Project Design Task Plan of the Construction of Communication and Command-and-Control System of the Air Force Shanghai Underground Command Post

1. Project name: Construction of Communication and Command-and-Control System of the Air Force Shanghai Base Underground Command Post.
2. Project code: 2706.
3. Construction location: Zaoyang Road, Shanghai.
4. Construction Basis: General Staff Department's General Staff Communication [2007] No. 433 "Assign the First Batch of Battlefield Communication Facilities Construction Projects of 2007" and the combat tasks and combat plans undertaken by this underground command post.
5. Construction purpose: Through the construction of this project, the Air Force Shanghai Base underground command post will have communication and command-and-control functions such as the transmission, processing, exchange of data, voice, and image information and short-wave transmitting and receiving, to provide stable, reliable and uninterrupted command means for combat command.

6. Construction scope and contents:

a. Communication system construction

The construction of command post communication hub: install one program-controlled 512 switch, one ATM data switch, one digital security switch, one AI powered switch, one command and dispatch system, and one video conference system; install one satellite mobile cabin station, 10 PCM access devices, one ODF, one DDF, one MDF, and 2 sets of supporting equipments including rectifier power system, battery pack, UPS power supply, etc.

The construction of receiver station: Install 20 400W shortwave adaptive receivers, 1 centralized receiving console, and 20 shortwave integrated service terminals; set up 5 receiving antennas of various types and 4 Antenna splitters; and lay 3 kilometers of cables. Install 1 set of short-wave broadband optical fiber transmission equipment. Build 1 new lightning protection and grounding system for the antenna field. Install 1 AC power distribution cabinets.

The construction of transmitter station: Install 20 400W shortwave adaptive transmitters, set up 18 transmitting antennas

**English translation is for reference only,
please refer to the original Chinese version for any discrepancies**

of various types and 1 sets of antenna switching systems, lay 8 kilometers of cables; install 1 set of 622Mb/s optical transmission equipment and 2 sets of PCM access equipment; build one new lightning protection and grounding system for the antenna field, and install 1 AC power distribution cabinets.

Construction of optical cable lines: Lay 60 kilometers optical cables connecting the newly-built transmitting/receiving stations with the underground command post, the Air force Shanghai Command Post, and the local civil telecommunication optical cables.

b. Command-and-control system construction

About 16,000 meters of shielded twisted-pair cable, 8,000 meters of metal line pipe, 5,000 meters of video and audio cable; 1,200 sets of corridor trunking, 1 fiber optic patch paneling, 1 set of voice wiring, 600 information modules, 100 floor-mounted optical outlet, 7 sets of wiring cabinets, 1 set of wiring management system; 1 item of power supply for lead-in equipment; 1 set of special connectors, test instruments and construction tools 4 sets; installation of special network, display control

and security equipment for the Air Force;
system integration 1.

7. Warfare technology requirements: through the construction of the project, requires new multi-route military optical cable to the local telecommunications company dispatch line optical cable, and open the main tunnel optical transmission system, the system capacity of not less than 2.5G with the potential of being upgraded to 10G; new short-wave transceiver, transmitter station and other communication and control system. After the completion of the system, the southern air ground command post shall be equipped with communication and command and control functions such as data, voice, image information transmission, processing, exchange and shortwave communication, so that it can provide stable, reliable and uninterrupted command means for combat command.

8. Estimated budget: the total construction cost is estimated to be 29.93 million yuan. Among them, the command post communication hub construction 6.24 million yuan; short-wave receiving station construction 2.13 million yuan; short-wave transmitting station construction

**English translation is for reference only,
please refer to the original Chinese version for any discrepancies**

6.2765 million yuan; route line construction 4.13 million yuan; command-and-control system construction 7.86 million yuan; other construction costs 1.8645 million yuan; preparatory costs 1.4251 million yuan.

9. Organization and implementation: the construction of the supporting communication and command-and-control system of the Air Force Shanghai Underground Command Post is organized and implemented by the Communication Department of the Air Force Command, designed by the Communication Engineering Design Institute of the Air Force Command, and constructed by the troops under the Air Force of Nanjing Military Region.

10. Schedule: construction drawings will be completed in mid November 2007, construction will begin in late November 2007, and project construction will be completed in December 2007.

Attachment: The Project List of the Construction of Communication and Command-and-Control System of the Air Force Shanghai Base Underground Command Post

English translation is for reference only,
please refer to the original Chinese version for any discrepancies

Key words: Communication, Command-and-control, construction projects [Shanghai Underground Command Post]

CC: Operations Department and Communication Department of General Staff; Finance Department of General Logistics Department; Operations Department and Communication Department of the Air Force Command; Finance Department of Air Force Logistics Department. (9 copies in total)

Project owner: Communication Department of Air Force Command

Contact: Xiao Mouji

Tel: 986523

Finance Department of Air Force Logistics Department

Contact: Zhang Zhenxi
