

中国人民解放军空军司令部 (请示)  
后勤部

Chinese People's Liberation Army Air Force Command  
Logistics Department  
(Request instructions)

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朱洪达 已阅  
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# 呈报空军南空地下指挥所通信与 指控系统建设工程设计任务书

## Reported to the Air Force South Air Force Underground Command Post communication and Command and Control System Construction Engineering Design Task Statement

总参谋部、总后勤部：

General Staff Department, General Logistics Department:

根据总参谋部参通〔2007〕433号《下达2007年度第一批战场通信设施建设项目》的指示精神，结合空军反“台独”应急作战准备任务，通过对南空地下指挥所通信与指控系统的作战需求进行梳理，现将建设工程设计任务书呈上。

According to the spirit of instruction of the General Staff Department's General Notice [2007] No. 433, "Issuing the First Batch of Battlefield Communication Facilities Construction Projects in 2007", combined with the air force's

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anti-"Taiwan independence" emergency combat preparation tasks, through the communication and command system of the South Air Force underground command post After sorting out the operational needs of the project, the construction project design task book will now be presented.

该工程通信系统建设主要包括：光（电）传输、卫星、短波通信等基础设施建设和程控（人工）交换、会议电视等应用网络建设以及通信电源等配套项目建设。指控系统建设主要包括：指挥所内综合布线、显示控制和网络设备安装等项目。以上任务完成后，可按一体化指挥平台要求与区域内其它系统实现互联，满足作战指挥需要。经测算，完成上述项目共需建设资金 4728.00 万元。

The construction of the communication system of the project mainly includes, infrastructure construction such as optical (electrical) transmission, satellite, short-wave communication, program-controlled (manual) switching, application network construction such as conference TV, and communication power supply and other supporting projects. The construction of the command and control system mainly

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includes: integrated wiring, display control and network equipment installation in the command post. After the above tasks are completed, it 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. It is estimated that a total of 47.28 million yuan of construction funds are required to complete the above-mentioned projects.

妥否，请批示。

No properly, please instructions.

附件：南空地下指挥所通信与指控系统建设工程设计任务书

Attachment: Engineering Design Task Statement for the Construction of the Communication and Command System of the South Air Force Underground Command Post

空军司令部  
CPLA Air Force Command

空军后勤部  
Logistics Department

二〇〇七年十一月三日 (March 11,2007)

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附件 (Attachment)

# 南空地下指挥所通信与指控系统 建设工程设计任务书

Communication and Command System of South Air Force

Underground Command Post

Construction engineering design task book

一、工程名称：南空地下指挥所通信与指控系统建设。

Project Name: Construction of Communication and

Command System of South Air Force Underground

Command Post

二、工程代号：2705。

Project Code: 2705

三、建设地点：南京宝华山。

Construction site: Nanjing Baohua Mountain

四、建设依据：总参谋部参通〔2007〕433号《下达2007年度第一批战场通信设施建设项目》和该地指担负的作战任务及作战方案。

Construction basis: General Staff Department General Notice [2007] No. 433 "Issued the First Batch of Battlefield

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Communication Facilities Construction Projects in 2007" and the combat tasks and combat plans undertaken by the local staff.

**五、建设目的：**通过该工程建设，使南空地下指挥所具备数据、话音、图象信息的传递、处理、交换和短波收发信等通信和指挥控制功能，为作战指挥提供稳定、可靠、不间断的指挥手段。

Construction purpose: Through the construction of this project, the South Air Force underground command post will have communication and command and control functions such as data, voice, and image information transmission, processing, exchange, and short-wave sending and receiving, so as to provide stable, reliable and uninterrupted command and control for combat command.

## **六、建设规模和内容：**

Construction scale and content:

(一) 通信系统建设 (Communication system construction)

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**指挥所通信枢纽建设：**安装1024线程控交换机、ATM数据交换机、数字保密交换机、智能人工交换机、指挥调度系统、会议电视系统各1套；安装卫星机动方仓站1套，PCM接入设备10端，ODF、DDF、MDF配线架各1架，整流电源系统、蓄电池组、UPS电源等配套设备2套（组）。

**Command post communication hub construction:** install 1,024 thread-controlled switches, ATM data switches, digital security switches, intelligent artificial switches, command and dispatch systems, and conference TV systems; install 1 set of satellite mobile warehouse stations and 10 PCM access devices , ODF, DDF, MDF distribution frame with 1 each, rectifier power system, battery pack, UPS power supply and other supporting equipment 2 sets (group).

**收信台建设：**安装1000W短波自适应接收机10部、400W短波自适应接收机20部，收信集中控制台1部，短波综合业务终端30部，架设各型收信天线9副、天线共用器8部，布放馈线6公里；安装短波宽带光纤传输设备1套；新建天线场防雷接地系统1套；安装交流配电柜2台。

**Receiver station construction:** Install 10 1000W



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shortwave adaptive receivers, 20 400W shortwave adaptive receivers, 1 centralized receiving console, 30 shortwave integrated service terminals, erect 9 receiving antennas of various types, and share the antennas.

**发信台建设：**安装1000W短波自适应发信机10部、400W短波自适应发信机20部，架设各型发信天线29副、天线交换系统2套，布放馈线15公里；安装622Mb/s光传输设备1套、PCM接入设备2端；短波宽带光纤传输设备5套；新建天线场防雷接地系统1套；安装交流配电柜2台。

**Transmitting station construction:** install 10 1000W short-wave adaptive transmitters, 20 400W short-wave adaptive transmitters, erect 29 various types of transmitting antennas, 2 sets of antennas switching systems, and deploy 15 kilometers of feeders; install 1 set of 622Mb/s optical transmission equipment, 2 sets of PCM access equipment; 5 sets of short-wave broadband optical fiber transmission equipment; 1 set of newly built antenna field lightning protection and grounding system; installed 2 sets of AC power distribution cabinets.



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**光缆线路建设：**新建发信台至地指、地指至南空基指、军区宝华山机务站、地方电信光缆110公里。

**Construction of optical cable lines:** 110 kilometers of newly-built transmitting station to the ground guide, ground guide to the South Air Force base guide, Baohuashan maintenance station of the military region, and local telecommunication optical cable.

## **（二）指挥控制系统建设**

**(Construction of command and control system)**

敷设屏蔽双绞线约52000米、金属线管约8000米、视音频电缆约71400米；安装走廊线槽1500套、配线盒68套、光纤配线器1套、语音配线1套、信息模块800个、地盅100个、配线机柜7套、UPS电源2套、配线管理系统1套；引接设备电源1项；购置专用接插件1套、测试仪表和施工工具4套；安装空军专用网络、显控和安全保密设备；系统集成1项。

Lay about 52,000 meters of shielded twisted-pair cables, about 8,000 meters of metal conduits, and about 71,400 meters of video and audio cables; install 1,500 sets of corridor

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trunking, 68 sets of wiring boxes, 1 set of optical fiber distributors, 1 set of voice wiring, and 800 information modules, 100 ground cups, 7 sets of wiring cabinets, 2 sets of UPS power supplies, 1 set of wiring management system; 1 power supply for pilot equipment; 1 set of special connectors, 4 sets of test instruments and construction tools; installation of air force Private network, display control and security equipment; 1 item of system integration.

**七、战技要求：**通过该工程建设，要求新建多路由军用光缆和到地方电信公司调度线光缆，并开通主坑道内光传输系统，系统容量不低于 10G；新建短波收、发信台及其它通信与指控系统。系统建成后，使南空地下指挥所具备数据、话音、图象信息的传递、处理、交换和短波收发信等通信和指挥控制功能，为作战指挥提供稳定、可靠、不间断的指挥手段。

Combat technical requirements: Through the construction of this project, it is required to build a multi-route military optical cable and a dispatching line optical cable to the local telecommunications company, and to open an optical

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transmission system in the main tunnel with a system capacity of not less than 10G; new short-wave receiving and transmitting stations and other communications with the accusation system. After the completion of the system, the Nankong underground command post will be equipped with communication and command and control functions such as data, voice, and image information transmission, processing, exchange, and short-wave transmission and reception, providing stable, reliable and uninterrupted command means for combat command.

**八、经费概算：**经测算，共需建设资金 4728.00 万元。其中指挥所通信枢纽建设 1115.00 万元；短波收信台建设 306.00 万元；短波发信台建设 1188.40 万元；线路建设 745.00 万元；指控系统建设 854.00 万元；工程建设其它费 294.59 万元；预备费 225.15 万元。

Estimated budget: According to estimation, a total of 47.28 million yuan of construction funds are required. Among them, the construction of the communication hub of the command post is 11.15 million yuan; the construction of the

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short-wave receiving station is 3.060 million yuan; the construction of the short-wave transmission station is 11.884 million yuan; the construction of the line is 7.450 million yuan; the construction of the accusation system is 8.54 million yuan; The fee is 2.2515 million yuan.

**九、组织实施：**南空地下指挥所配套通信与指控系统建设，由空军司令部通信部组织计划和实施，空军司令部通信工程设计所负责设计，南京军区空军所属部队负责施工。

Organization and implementation: The construction of the supporting communication and command and control system of the South Air Force Underground Command Post will be organized, planned and implemented by the Communication Department of the Air Force Command. The Communication Engineering Design Institute of the Air Force Command is responsible for the design, and the troops affiliated to the Air Force of the Nanjing Military Region are responsible for the construction.

**十、进度安排：**2007 年 12 月底前完成施工图设计，

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2008 年 1 月开始施工，2008 年 3 月完成项目建设。

Schedule: Construction drawings will be completed by the end of December 2007, construction will begin in January 2008, and the project will be completed in March 2008.

附件：南空地下指挥所通信与指控系统建设项目表

Attachment: Construction Project Form of Communication and Command System of South Air Force Underground Command Post

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关键词：通信 指挥控制 建设项目 [南空地指]

Key Words: Communications, Command and Control  
Construction Project [Southern Air Force Ground Command]

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