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RTTSZYUW RUEKJCS8980 0102054-SSSS--RUEALGX.
ZNY SSSSS
HEADER
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FM JOINT STAFF WASHINGTON DC
INFO RUEADWD/OCSA WASHINGTON DC
RUENAAA/CNO WASHINGTON DC
RUEAHQA/CSAF WASHINGTON DC
RUEACMC/CMC WASHINGTON DC
RUEAIIA/CIA WASHINGTON DC
RUEAMCC/CMC CC WASHINGTON DC
RUEALGX/SAFE
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FM CIA
TO RUETIAA/DIRNSA
RUEHC/DEPARTMENT OF STATE
RUEKJCS/DIA
RUEADWW/WHITE HOUSE SITUATION ROOM
RUCIAEA/FTD WPAFB OH
BT
CONTROLS [redacted]
CITE [redacted]
SERIAL: [redacted]
BODY
PASS: NSA FOR ZKZK OO DLS DE (FOR NSOC); STATE FOR INR.

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CENTRAL INTELLIGENCE AGENCY

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[redacted]

DIST: 10 JANUARY 1990

COUNTRY: USSR

SUBJ: 1. OVERVIEW OF THE ACADEMY OF SCIENCES OF THE UKRAINIAN SSR
2. THE ANTONOV AIRCRAFT DESIGN BUREAU
3. THE KIEV AIRCRAFT FACTORY; CONVERSION TO PRODUCTION OF CONSUMER ITEMS

DOI: SEPTEMBER 1989

SOURCE: [redacted]

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TEXT: 1. THE UKRAINIAN ACADEMY OF SCIENCES HAS 84 EXPERIMENTAL INSTITUTES, 85 LABORATORIES AND 90,000 EMPLOYEES. THERE ARE 350 ACADEMICIANS AND CORRESPONDING MEMBERS, AND MORE THAN 12,000 DOCTORS OF SCIENCE AND CANDIDATES OF SCIENCE. [redacted] THREE MAIN CATEGORIES OF WORK DONE BY THE ACADEMY. THE FIRST AREA INCLUDES STUDIES ON BOARD SPACESHIPS, INCLUDING STUDY OF BIOPROCESSES IN WEIGHTLESSNESS, CRYSTAL GROWTH, BOTANY, REACTIONS OF BIOLOGICAL ORGANISMS AND CELLS, AND DEVELOPMENT OF FUTURE FLYING MACHINES AND DIFFERENT KINDS OF ENGINES AT THE INSTITUTE FOR TECHNICAL MECHANICS. THE SECOND CATEGORY INCLUDES ASTRONOMICAL OBSERVATORIES ON THE GROUND AND ON BOARD SPACECRAFT (VEGA AND PHOBOS MISSIONS), ON-LINE DATA PROCESSING WITH SUPER MINICOMPUTERS, REMOTE PROBING FROM SPACE, ICE AND SNOW RESEARCH WITH THE THE INSTITUTE OF RADIO AND PHYSICAL ELECTRONICS AND OTHER HYDROPHYSICS AND GEOGRAPHY INSTITUTES, STUDY OF DIFFERENT TYPES OF GEOLOGICAL COMPOSITION IN THE UKRAINE, AND STUDY OF THE ACTIVE ZONES OF THE CRIMEAN AND CARPEAN REGIONS. THE THIRD AREA OF WORK COVERS THE STUDY OF NEAR-EARTH SPACE, THE MAGNETOSPHERE, OZONE CHANGES, AND SPACE PLASMA PARAMETERS. THESE TOPICS ARE BEING RESEARCHED BY THE INSTITUTE OF RADIOASTRONOMY AND KIEV UNIVERSITY.

2. [redacted] 50 PERCENT OF THE ACADEMY'S BUDGET IS PROVIDED BY THE SOVIET GOVERNMENT, AND THAT THE REMAINDER IS PROVIDED BY INDUSTRY AND CONTRACTS WITH DESIGN BUREAUS. [redacted] THE UKRAINIAN ACADEMY OF SCIENCES HAS THE AUTHORITY TO UNILATERALLY ENGAGE IN COOPERATIVE RESEARCH WITH THE UNITED STATES, AND [redacted] THE AREAS OF MOST INTEREST FOR COOPERATION ARE MATH, THEORETICAL PHYSICS, AND ASTRONOMY. [redacted] ASKED ABOUT U.S. RESEARCH IN THE AREA OF UNIDENTIFIED FLYING OBJECTS, SAYING THAT THE ACADEMY HAS SEVERAL ORGANIZATIONS THAT FOLLOW THE SUBJECT AND THAT SOME SCIENTISTS THINK IT IS A SERIOUS PROBLEM. [redacted] THERE IS NO SPECIFIC STUDY OF SYSTEMS ENGINEERING IN THE ACADEMY, BUT THAT THE SUBJECT IS INCORPORATED IN MANY INSTITUTES SUCH AS METAL SCIENCES, COMPUTERIZATION AND INFORMATION SCIENCES, AND MATH. THE UKRAINIAN ACADEMY OF SCIENCES IS NO LONGER PARTICIPATING IN THE SOVIET MARS PROGRAM, SINCE THIS HAS BECOME A STATE PROJECT.

3. THE ANTONOV AIRCRAFT DESIGN BUREAU DESIGNS COMMERCIAL AND CARGO AIRCRAFT, AND HAS 12,000 EMPLOYEES. THE AN-225 AIRCRAFT, DESIGNED AT THIS FACILITY, WAS USED AS THE TRANSPORT FOR THE BURAN SPACE SHUTTLE. ENGINEERS AT THE FACILITY ARE INVESTIGATING METHODS TO REDUCE THE WEIGHT OF THE AIRCRAFT, SUCH AS NEW COMPOSITES. THE BUREAU USES PERSONAL COMPUTERS AND MAINFRAMES FOR OPTIMIZATION AND TESTING, ESTIMATION OF AERODYNAMICS, FLIGHT INSTRUMENT TESTS, AND DATA PROCESSING.

4. THE KIEV AIRCRAFT FACTORY OPERATES IN CLOSE COOPERATION WITH THE ANTONOV DESIGN BUREAU. THE FACTORY BUILT THE AN-24 PASSENGER PLANE, WHICH CARRIES 20 PERCENT OF AEROFLOT'S PASSENGERS.

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THE SERVICE LIFE OF THE PLANE IS 35,000 FLIGHTS. PRODUCTION OF THE AN-26 BEGAN IN 1975 WHEN AN-24 PRODUCTION WAS STOPPED. SOME 1,400 AN-26 AIRCRAFT HAD BEEN PRODUCED AS OF SEPTEMBER 1989. BOTH PLANES ARE EXPORTED TO AFRICA, ASIA, PERU AND EASTERN EUROPE. THE FACTORY ALSO MAKES SEVERAL MODELS OF THE AN-30 AIRCRAFT, USED FOR FISH RECONNAISSANCE, FIRE FIGHTING, AND OVERHEAD PHOTOGRAPHY. THE AN-124 AIRCRAFT HAS BEEN PRODUCED SINCE 1984 IN SERIAL PRODUCTION, AND CAN BE EASILY CONVERTED FROM CIVILIAN TO MILITARY USE. THE CURRENT PRODUCTION RATE IS THREE PER YEAR.

5. THE KIEV AIRCRAFT FACTORY NOW PRODUCES CONSUMER GOODS SUCH AS WASHING MACHINES, BABY CARRIAGES, MEDICAL PRODUCTS, DENTIST CHAIRS, BAROMETRIC CHAMBERS, AND SPECIAL MACHINERY FOR CANNING FOOD. THE FACTORY IS RETRAINING ITS PERSONNEL TO PRODUCE THESE CONSUMER GOODS, AND IT IS USING COMPUTERS, INCLUDING COMPUTER AIDED DESIGN AND MANUFACTURING, TO SOLVE DESIGN AND FABRICATION PROBLEMS. THE PRODUCTION RATE OF VARIOUS ITEMS IS DETERMINED BY THE PLANNING DEPARTMENT, AND THE PRODUCTION DEPARTMENT PERFORMS QUALITY CONTROL ON THE INPUTS AND ALL FINISHED PRODUCTS. THE FACTORY IS USING SOME ROBOTICS TECHNOLOGY FOR ASSEMBLY, BUT HAS 16,000 EMPLOYEES. THE FACTORY PRODUCED 19 MILLION RUBLES WORTH OF CONSUMER GOODS IN 1988 AND 21 MILLION RUBLES IN 1989. PRODUCTION OF CONSUMER GOODS AND AIRCRAFT IS MANAGED BY A SINGLE PRODUCTION SUPERVISOR.

ADMIN
ACQ; (EARLY DECEMBER 1989).

DISSEM: FIELD: NONE.

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