YUZHNOYE’S TECHNOLOGIES

IN NATIONAL AND INTERNATIONAL SPACE PROGRAMS

Committee on the Peaceful Uses of Outer Space
Fiftieth session
11 June 2007
Yuzhnoye State Design Office named after M. Yangel is one of the largest research and design organizations developing rocket & space technologies.
900 launches of the space vehicles were performed.

70 types of spacecraft and 7 space launch systems were developed.

More than 400 satellites of Yuzhnoye SDO were deployed into orbits.

Increased number of foreign contracts.

Yuzhnoye’s achievements.
More than 400 spacecraft of 70 types were designed and launched. Large-scale production of unified spacecraft on their basis was organized for the first time in the world.
YUZHNOYE’S SPACE ACTIVITIES
THE MOST PERSPECTIVE REGIONS FOR COOPERATION
DNEPR INTERNATIONAL PROJECT
LAND LAUNCH INTERNATIONAL SPACE PROJECT
CYCLONE-4 INTERNATIONAL SPACE PROJECT

- Payload Fairing
- Payload Envelope
- Payload Adapter
- 3rd Stage Liquid Jet System
- GNC, TLM, ESS hardware
- 3rd Stage Propellant Tanks
- Interstage 2/3
- RD0110 Engine
- 2nd Stage Interstage
- 2nd Stage Propellant Compartment
- 2nd Stage Aft Bay
- 2nd Stage Steering Engine
- 2nd Stage Main Engine
- 1st Stage Interstage
- 1st Stage Oxidizer Tank
- 1st Stage Equipment Bay
- 1st Stage Fuel Tank
- 1st Stage Aft Bay
- 1st Stage Steering Engine
- 1st Stage Main Engine
CREATION OF NEW SPACECRAFT
EGYPTSAT SPACECRAFT DEVELOPED BY YUZHNOYE

SUCCESSFULLY LAUNCHED ON APRIL 17, 2007
YUZHNOYE’S PROPULSION SYSTEMS
EUROPEAN VEGA PROJECT

Yuzhnoye SDO participates in this project by supplying the main engine unit, which is the component of the liquid-propellant propulsion system used on the 4th stage of the European Vega LV.
Advanced Materials and Technology

- Metal Composites
  - are produced by explosion welding
- Plain bearings
- Bimetallic adapters
- 3-layer honeycomb structures
- Heat exchangers
- Metal-Plastic Composites
- Nozzle inserts and bells made of carbon-carbon composite
- Metal plastic bottles
- Metal plastic bottles
- Launch vehicle aft sections and spacecraft fuselages made of carbon fiber composite
- Wind power generator blades and mine structures made of fiberglass plastic
- Non-metallic composites
- Solid rocket motor body of "cocoon" type
LUNAR MISSION

Block E – lunar landing module
NUCLEAR WASTE DISPOSAL TO SPACE
KEY TO THE SUN SPACE PROJECT

- Re-reflecting spacecraft
- Re reflected energy ray
- Focal line
- Reflecting spacecraft
- Energy ray receiver
- Solar radiation density area
- Earth shadow
- Working part of concentration area
- 550 thousand km.
- 1200 thousand km.
SPACE PATROL PROJECT

- Space Patrol Satellite
- Satellite positioning data
- Personal Terminal
- Ground Station
- Alarm Button
- Police
- Ambulance
Earthquake Prediction Space System

Minibus MB-2

200…1500 km

Scientific equipment
BASIC FUTURE TASKS

- International cooperation expansion
- Development of the perspective technologies
- Investment activities
Available inclinations

Available launch sites

Launch services

Yuzhnoye's launch vehicle payload capability
CONTACT DETAILS

Stanislav Konyukhov
General Designer-
General Director
Yuzhnoye SDO

Alexander Degtyarev
First Deputy General Designer-
General Director
Yuzhnoye SDO

Oleg Ventskovsky
Director
European Representation
Yuzhnoye SDO

3, Krivorozhskaya Street
Dniepropetrovsk, UKRAINE, 49008
Phone: +380 56 770 04 47
Fax: +380 56 770 01 25
e-mail: space@yuzhnoye.com

20, rue Vautier, B-1050, Bruxelles, BELGIUM
Phone/Fax +32 (2) 644 90 64
e-mail: oventskovsky@brutele.be