

**II-nd INTERNATIONAL
SCIENTIFIC CONFERENCE
for military and technical issues,
defence and security problems,
application of double-purpose
technologies**

May 18–19, 2005

Conference-room in Hotel "Belarus"
Storozhevskaya str, 15
Minsk, the Republic of Belarus

**PROGRAMME-
INVITATION**

ORGANIZERS

**The State Military-Industrial Committee
of the Republic of Belarus**

**The Belarusian Institute of System Analysis
and Information Support for Scientific
and Technical Sphere**

WITH ASSISTANCE OF

The State Secretariat of the Security Council

Ministry of Defence

Ministry of Industry

Ministry of Education

Ministry of Internal Affairs

Ministry for Emergency Situations

Ministry of Foreign Affairs

Ministry of Trade

The State Committee on Science and Technologies

**The National Academy of Sciences
of the Republic of Belarus**

The State Aviation Committee

The State Customs Committee

The State Security Committee

Minsk City Executive Committee

National Exhibition Center "BelExpo"

ORGANISING AND SCIENTIFIC COMMITTEE

Leader:

Valeryj E. Kratenok, Director of Belarusian Institute of System Analysis and Information Support for Scientific and Technical Sphere

Deputies:

Serghei K. Turbin, Chief of the Administrative Board of the State Military-Industrial Committee of the Republic of Belarus;

Nikolai M. Lazar, Deputy Chief of the Administrative Board, Chief of Department of the State Military-Industrial Committee of the Republic of Belarus

Members:

Vasily M. Buloichik, Chief of Sub-Faculty of the Military Academy of the Republic of Belarus;

Igor M. Bykov, Chairman of the Scientific-Technical Committee of Ministry of Defence of the Republic of Belarus;

Igor E. Zuikov, Chief of Sub-Faculty of the Belorussian National Technical University;

Ivan M. Kosachiov, Chief of the Scientific Research Laboratory of the Military Academy of the Republic of Belarus;

Serghei M. Kostromitsky, Deputy Director for Science of the Design Bureau "Kamerton";

Serghei G. Kotov, Deputy Chief of the Scientific-Research Institute of Fire-Fighting Security and Emergency Problems;

Leonid M. Lynkov, Chief of Sub-Faculty of the Belorussian State University of Informatics and Radio Electronics;

Valentin V. Muraviov, Chief of Sub-Faculty of the Belorussian State University of Informatics and Radio Electronics;

Alexander P. Patskevich, Assistance Professor of the Academy of Ministry of Internal Affairs of the Republic of Belarus;

Alexander A. Petkov, Chief of Department of the Scientific-Research Institute of the Armed Forces of the Republic of Belarus;

Serghei A. Savenko, Chief of the Board of the Scientific-Research Institute of the Armed Forces of the Republic of Belarus;

Nikolai M. Slusar, Professor of Sub-Faculty of the Military Academy of the Republic of Belarus;

Vladimir I. Solenkov, Consultant of Department of the Scientific-Technical Committee of Ministry of Defence of the Republic of Belarus;

Vitaly I. Stetsurenko, Chief of Department of the United Institute of Informatics Problems of the National Academy of Sciences of the Republic of Belarus.

GOAL OF THE CONFERENCE

To analyze the problems of scientific and engineering research, R&D activities in the interests of new technologies and materials, equipment and devices intended for defense and security, the ways to develop and intensify high-tech productions to enhance scientific and technical potential in the Republic of Belarus, to create new conditions for tightened military engineering collaboration, integration and cooperation with the close neighboring and other foreign states in the key areas of defence industry.

SUBJECT OF THE CONFERENCE

– Military engineering aspects of defence and security, interaction and control of army-related components in the national military systems under conditions of armed conflicts and nondefence operations.

– Development of military engineering collaboration in the frame of the common and comprehensive security concept.

– Scientific and technical basis of new defence technologies, armament and military equipment systems, design and development of promising military and dual-use technologies.

– High-accuracy intelligence, control and destruction means.

– Protection means for forces, and economic objects.

– Information support and computer-aided systems for force and weapon control, information protection systems;

– Specialized technical safety means; anti-terror equipment and techniques;

– Upgrade and repair of military equipment, utilization of obsolete and redundant armaments;

– Electronic and ion optics, night vision equipment;

– Rescue equipment to work in emergency situations, fire-extinguishing means;

– Metrology support for military and dual-use technologies.

PROGRAMME OF THE CONFERENCE

May 18

Conference-room in Hotel "Belarus"

10.00 – 14.00 **PLENARY MEETING**

MEETINGS IN SECTIONS

May 18

Conference-room in Hotel "Belarus"

15.00 – 18.00 SECTION 1.

Scientific and technical basis for new and defence technologies, armament systems and military hardware and equipment

May 19

Conference-room in Hotel "Belarus"

9.00 – 13.30 SECTION 2.

Modernization, operation and reconditioning of armaments and military hardware and equipment. Problems of utilization of armaments and military hardware

14.30 – 17.15 SECTION 3.

Automated Control Systems for troops and weapons command and control. Information protection systems

Small hall of Hotel "Belarus"

10.00 – 13.30 SECTION 4.

Actual problems of military-technical politics

14.30 – 17.15 SECTION 5.

Protection against emergency situations at peace and war time

May 19

Conference-room in Hotel "Belarus"

17.15 – 18.00 **SUMMING UP AND CLOSURE OF THE CONFERENCE**

PLENARY MEETING

May 18. 10.00 – 14.00

Conference-room in Hotel "Belarus"

Person, presiding at the meeting:

M.N. Savich, Deputy Chairman of the State Military-Industrial Committee of the Republic of Belarus

V.E. Kratenok, Director of Belarusian Institute of System Analysis and Information Support for Scientific and Technical Sphere

09.00 – Registration of participants
10.00 of the conference

10.00 – Opening of the conference
10.10

10.10 – Modern world trends in the development
10.35 of weapons and military equipment

M.N. Savich, Deputy Chairman of the State Military-Industrial Committee of the Republic of Belarus

10.35 – Role of contemporary geo-informational
10.55 and navigation technologies in provision of security of the state

G.P. Kobelev, Chief of the Navigation and Topographic Department of the General Staff of the Armed Forces of the Republic of Belarus;

I.V. Evglevsky, Senior Research Worker of the Scientific-Research Institute of the Armed Forces of the Republic of Belarus;

N.N. Morozov, Senior Research Worker of the Scientific-Research Institute of the Armed Forces of the Republic of Belarus

10.55 – Status and Perspectives of Development
11.15 of the Double-application Technologies in the National Academy of Sciences of the Republic Of Belarus

P.A. Vityaz, First Deputy Chairman of Presidium of the National Academy of Sciences of the Republic of Belarus

- 11.15 – Scientific-methodical basis
 11.40 for improvement of strategic management system in the field of military and technical cooperation

S.V. Chemezov, General Director of Federal State Unitary Enterprise “Rosoboronexport”

- 11.40 – Forecasting and programming system
 12.05 in the military-economic sphere: analysis of effectiveness and ways of improvement, as an example — in the Republic of Belarus

V.M. Dernovoi, Deputy Chief of the Department for Economic Issues of defence of Ministry of Economy of the Republic of Belarus

- 12.05 – Coffee-break
 12.30

- 12.30 – Russian small arms at the world market
 12.55 of military production

M.T. Kalashnikov, Open Joint Stock Company “Concern “Izhmash”, FSUE “Rosoboronexport”

- 12.55 – Main trends of scientific researches
 13.20 in Military Academy of the Republic of Belarus

S.N. Nefedov, Assistant Professor of the Military Academy of the Republic of Belarus

- 13.20 – Responses to questions and discussion
 14.00 of results of the plenary meeting
 14.00 – Lunch
 15.00

TIME-LIMIT OF MEETINGS IN SECTIONS

May 18. 15.00 – 18.00
 Conference-room in Hotel “Belarus”

SECTION 1. SCIENTIFIC AND TECHNICAL BASIS FOR NEW AND DEFENCE TECHNOLOGIES, ARMAMENT SYSTEMS AND MILITARY HARDWARE AND EQUIPMENT

Leader of the section — Chairman of the Scientific and Technical Committee of Ministry of Defence of the Republic of Belarus, **I.M. Bykov**

- 15.00 – Tactical equipping for small arms
 15.15 by BelOMO

V.A. Bursky, General Director of BelOMO

- 15.15 – Increase of jamming immunity of air
 15.30 defence missile complexes by including the optoelectronic channels for target detection as their components

I.M. Bykov, Chairman of the Scientific and Technical Committee of Ministry of Defence

- 15.30 – Method of obtaining of coat, reducing
 15.45 reverse radar reflection

V.N. Mizgaylov, (Gomel)

- 15.45 – Perspectives of creation of relativistic
 16.00 electrons ultra-high power generators

A.F. Chernyavski, V.K. Goncharov, A.A. Kuraev, A.K. Sinitsyn Scientific-Research Institute “Institute for Applied Physical Problems, named after A.N. Sevchenko”, Belorussian State University

- 16.00 – Peculiarities of measurement
 16.15 of coordinates and parameters of target motion under super-fast scanning of directional pattern

V.A. Kurenev, Chief of Sub-Faculty of Military Academy of the Republic of Belarus;
A.A. Korotyshevsky, Chief Lecturer

- 16.15 – Control system for workability of lighting
 16.30 equipment and aerodromes
V.K. Erokhovets, A.L. Potapov,
G.V. Kiryachok, United Institute
 of Informatics Problems
 of the National Academy of Sciences
 of the Republic of Belarus
- 16.30 – Coffee-break
 16.45
 16.45 – Absorbers of electromagnetic radiation
 17.00 of super-high frequency and millimeter-
 wave bands of wide application
D.M. Lynkov, T.V. Borbotko,
Fan N. Zang, Belorussian State University
 for Informatics and Radio Electronics
- 17.00 – Optical observation and control systems
 17.15 with lasers application
K.V. Kozlov, A.A. Stavrov, Open Joint
 Stock Company “Peleng”
- 17.15 – DPLA BRAT Complex
 17.30 **N.V. Chistyakov,** Chief Designer
 of the Scientific and Production Design
 Centre “Novik-XXI century”, Russia
- 17.30 – Responses to questions and discussion
 18.00 of results of the meeting of the section

May 19. 9.00 – 13.30
 Conference-room in Hotel “Belarus”

**SECTION 2. MODERNIZATION,
 OPERATION AND RECONDITIONING
 OF ARMAMENTS AND MILITARY
 HARDWARE AND EQUIPMENT.
 PROBLEMS OF UTILIZATION
 OF ARMAMENTS AND MILITARY
 HARDWARE**

- Leader of the section — Chief of the Board
 of the Scientific-Research Institute of the Armed
 Forces of the Republic of Belarus, **S.A. Savenko**
- 09.00 – Registration of participants
 10.00 of the conference
- 10.00 – Methods of estimation of expediency
 10.15 of modernization of a sample (complex)
 of the armaments and military equipment
A.A. Petkov, Chief of the Scientific-
 research Department of the Scientific-
 Research Institute of the Armed Forces
 of the Republic of Belarus;
A.G. Aghishev, Senior Research Worker
 of the Scientific-Research Institute
 of the Armed Forces of the Republic
 of Belarus
- 10.15 – Main trends of modernization of “BUK”
 10.30 anti-aircraft missile system
A.I. Kurilkin, Chief of the Design Bureau
 of Unitary Enterprise “Scientific-Research
 Institute for Automated Systems”;
B.I. Makarchenko, Yu.I. Mosienko,
V.I. Papushoi
- 10.30 – Perspectives of modernization of missile
 10.45 launchers for firing the aviation guided
 missiles
E.Zh. Pavlushkin, Assistant Professor
 of Sub-Faculty № 72 of Military Academy
 of the Republic of Belarus;
S.A. Glavatskih, 5th year Student
 of the Aviation Faculty of Military
 Academy of the Republic of Belarus
- 10.45 – Bulgarian experience in modernization
 11.00 of the airborne radio-electronic complex
 of Mi-17, Mi-24 helicopters
G.S. Sotirov, Bulgarian Academy
 of Sciences. Institute of Space Researches;
S.M. Asenov, V.G. Vasev, Alliance
 for Development of the Air Force
 of Bulgaria

SECTION 3. AUTOMATED CONTROL SYSTEMS FOR TROOPS AND WEAPONS COMMAND AND CONTROL. INFORMATION PROTECTION SYSTEMS

Leader of section— Chief of Sub-Faculty of Military Academy of the Republic of Belarus, Ph.D. (technical sciences), Professor **V.M. Buloychik**

- 11.00 – Development of adaptive intellectual
11.15 system for mobile vehicle control
S.A. Rynkevich, Assistant of Professor of Sub-Faculty "Automobiles", Belorussian-Russian University (Moghilev)
- 11.15 – Airborne data display system.
11.30 Image digital processing: perspectives, problems and resolution in the airborne multi-functional TV indicators
P.G. Lubochko, I.B. Semirechinsky, Scientific-Research Unitary Enterprise "Horizon" Digital Television Institute
- 11.30 – Vibrodiagnosis of mechanical components
11.45 of aircraft in operation
V.R. Vashkevich, Assistant Professor of Sub-Faculty № 72 of Military Academy of the Republic of Belarus
- 11.45 – Coffee-break
12.00
- 12.00 – SHF contactless indicator for dynamic
12.15 status of objects
D.F. Rudenko, A.N. Volkovets, A.V. Gusinsky, Belorussian State University of Informatics and Radio Electronic
- 12.15 – Intellectual sensors for navigation
13.00 and orientation equipment
V.V. Akunets, A.P. Grinchuk, G.K. Mironovich, I.A. Taratyn, Unitary Enterprise "Minsk Scientific-Research Institute of Radio materials"
- 13.00 – National Program of the Republic
13.15 of Bulgaria for utilization of conventional ammunition
S.M. Asenov, Bulgarian Academy of Sciences. Alliance for Development of the Air Force of Bulgaria
- 13.15 – Responses to questions and discussion
13.30 of results of the meeting in section
13.30 – Lunch
14.30

- 14.30 – Software-informational complex
14.45 for analysis of characteristics of terrain for solution of operative and tactical missions on the basis of digital maps and data of remote sounding of the Earth
A.N. Kryuchkov, Head of Laboratory "Cartography Systems and Technologies" of the Unified Institute of Informatics of the National Academy of Sciences of the Republic of Belarus
- 14.45 – Methods of estimation of protection
15.00 of automated systems under high requirements to security
A.M. Krishtophik, Senior Research Worker of the Unified Institute of Informatics of the National Academy of Sciences of the Republic of Belarus
- 15.00 – Methodical aspects of construction
15.15 of the system for support of taking decisions for substantiation of numerical and qualitative strength, territorial and hierarchical structure of radio-technical troops groupings
A.A. Petkov, Chief of the Scientific-research Department of the Scientific-Research Institute of the Armed Forces of the Republic of Belarus,
- 15.15 – Problem issues of development
15.30 of mathematical provision for computer military games
V.M. Buloychik, Chief of Sub-Faculty of Information-Computing Systems of Military Academy of the Republic of Belarus

- 15.30 – Military and technical problems
15.45 of development of combat actions
simulation systems
V.M. Berikbaev, Senior Research Worker,
Deputy Chief of Sub-Faculty
of Information-computering
Systems of Military Academy
of the Republic of Belarus
- 15.45 – Coffee-break
16.00
- 16.10 – Use of up-to-date information technologies
16.15 for organization of computer forms
of operational training
A.V. Gertsev, Lecturer of Sub-Faculty
of Information-Computing Systems
of Military Academy of the Republic
of Belarus
- 16.15 – Informational processes in the integrated
16.30 control system for Air Force and Air
Defence
V.A. Korolenko, Scientific-Research
Institute of Automated Means
- 16.30 – Application of OS Windows NT/2000
16.45 in the military purpose Automated Control
System
M.N. Bobov, Chief of Laboratory
of Unitary Enterprise “Scientific-Research
Institute for Automated Systems”
- 16.45 – Perspectives of use of high-altitude
17.00 information platforms
N.M. Naumovich, V.V. Muraviov,
Belorussian State University
of Informatics and Radio Electronics
- 17.00 – Expert system of analysis and provision
17.15 of electromagnetic compatibility in local
radio groupings
V.I. Mordachiov, P.A. Litvinko,
Belorussian State University
of Informatics and Radio Electronics

May 19. 10.00 – 13.30
Small hall of Hotel “Belarus”

SECTION 4. ACTUAL PROBLEMS OF MILITARY-TECHNICAL POLITICS

- Leader of section — Chief of Department of the State
Military Industrial Committee of the Republic of Be-
larus, Candidate of Technical Sciences **S.K. Turbin**
- 10.00 – Model of estimation of effectiveness
10.15 of the armament system of the Armed
Forces
Yu.I. Semak, Senior Research Worker
of the Scientific-Research Institute of the
Armed Forces of the Republic of Belarus;
A.A. Petkov, Chief of the Scientific-
Research Department of the Scientific-
Research Institute of the Armed Forces
of the Republic of Belarus
- 10.15 – Conceptual aspects of the military
10.30 and technical politics of rear service
of the Armed Forces
A.A. Rodionov, Chief of the Scientific-
Research Institute of the Armed Forces
of the Republic of Belarus;
M.P. Zaikovsky Senior Research Worker
of the Scientific-Research Institute of the
Armed Forces of the Republic of Belarus;
V.I. Dimitrov, Senior Research Worker
of the Scientific-Research Institute of the
Armed Forces of the Republic of Belarus
- 10.30 – Issues of scientific provision for manage-
10.45 ment of the state military organization
V.V. Vasilkov, B.M. Verveiko,
The Scientific-Research Institute of the
Armed Forces of the Republic of Belarus
- 10.45 – Determination of critical important
11.00 informational objects in the state military
organization
A.N. Semashko, Senior Research Worker
of the Scientific-Research Institute of the
Armed Forces of the Republic of Belarus,
A.P. Bobovik, Senior Research Worker
of the Scientific-Research Institute of the
Armed Forces of the Republic of Belarus
- 11.00 – Principles of construction of the hierarchi-
11.15 cal information control military purpose
systems
B.M. Verveiko, the Scientific-Research
Institute of the Armed Forces of the Re-
public of Belarus

- 11.15 – Development of organization
 11.30 and economic mechanisms of the military
 and technical system in the interests
 of forming of the information and techno-
 logical area of Russia and CIS counties.
N.N. Shvets, Federative State Unitary
 Enterprise “Rosoboronexport”, Concern
 “Izhmash”, Moscow
- 11.30 – Coffee-break
 11.45
 11.45 – Rational trends of activization of innova-
 12.00 tions in the interests of development and
 promotion to the world market of highly
 technological military-purpose production
 for the Land Forces
I.O. Sevastianov, Federative State Unitary
 Enterprise “Rosoboronexport”
- 12.00 – About pricing for military-purpose produc-
 12.15 tion in the Republic of Belarus
V.M. Dernovoi, Deputy Chief of the De-
 partment for Economic Issues of Defence
 of Ministry of Economy of the Republic
 of Belarus
- 12.15 – About influence of military-economic
 13.00 monitoring on stages of life cycle
 of armaments and military equipment
Yu.V. Filatov, I.V. Punghin,
 The Scientific-Research Institute
 of the Armed Forces of the Republic
 of Belarus;
D.M. Molotok, Military Financial
 and Economic University, Moscow
- 13.00 – Political and legal issues of formation
 13.15 of the military and technical cooperation
 of the Union State under conditions
 of European integration
A.A. Uzhanov, Federative State Unitary
 Enterprise “Rosoboronexport”
- 13.15 – The state and prospects of development
 13.25 of military standardization in the Republic
 of Belarus
N.M. Lazar, Deputy Chief
 of the Administrative Board, Chief of De-
 partment of the State Military-Industrial
 Committee of the Republic of Belarus
- 13.25 – Responses to questions and discussion
 13.30 of results of meeting in section
 13.30 – Lunch
 14.30

May 19. 14.30 – 17.15
 Small hall in Hotel “Belarus”

SECTION 5. PROTECTION AGAINST EMERGENCY SITUATIONS AT PEACE AND WAR TIME

- Leader of section — **S.G. Kotov**, Deputy Director
 of the Scientific-Research Institute for Fire Safety
 and Emergency Problems
- 14.30 – Analysis of requirements to the status
 14.45 of explosion- and fire-protection
 of places of storage of ammunition
Yu.B. Leontiev, D.A. Dulenkov, Military
 Academy of the Republic of Belarus
- 15.00 – Research of dependence of areas
 15.15 of storage of ammunition on maximum
 load value per explosive
A.V. Golik, Military Academy
 of the Republic of Belarus
- 15.15 – Use of ecologically safe fire-fighting
 15.30 means
M.E. Lustenkov, A.I. Krez, Belorussian-
 Russian University (Moghilev)
- 15.30 – Automated complex for surface weather
 15.45 observations
**V.V. Brishten, V.A. Kolosov, K.A. Krach-
 kovsky, A.V. Sobolevsky, A.A. Stovpak**,
 Unitary Enterprise “Minsk Scientific-
 Research Institute of Radio Materials”
- 15.45 – Software and hardware complex for inte-
 16.00 gral monitoring for security of objects
 on the basis of computer and telecommu-
 nication technologies
F.M. Grib, A.V. Zhovna, The Scientific-
 Research Institute for Fire Safety
 and Emergency Problems of Ministry
 for Emergency Situation
- 16.00 – Duplicated textiles for fire-fighters protec-
 16.15 tive clothes against heightened thermal
 effect
**N.M. Dmitrakovich, Yu.G. Rusetsky,
 V.V. Gnutenko A.V. Ivanov, V.I. Olshansky**
 Scientific Information Centre of Vitebsk
 Regional Department of Ministry
 for Emergency Situations of the Republic
 of Belarus

- 16.15 – Instrumental complex for ripping-up
16.30 of concrete constructions
**N.S. Yankevich, A.S. Klimuk,
S. G. Kotov, A.A. Oreshko,**
the Scientific-Research Institute
for Fire Safety and Emergency Problems
of Ministry for Emergency Situations
- 16.30 – Coffee-break
16.45
- 16.45 – Water purification autonomous plant
16.55 MABOY on the basis of ARS-14 pouring
station
**D. Grinshpan, N.G. Tsygankova,
T.A. Savitskaya, N.G. Ponariadov,**
Belorussian State University;
S.G. Kotov, A.Yu. Lupey, Ministry
for Emergency Situations
- 16.55 – Experience of training of scientific-
17.05 pedagogical staff of highest qualification
at the military-medical faculty of Belorus-
sian State Medical University
S.N. Shnitko, Chief of the Military-
Medical Faculty of Belorussian State
Medical University
- 17.05 – Improvement of portable sets of medical
17.15 equipment for troops subdivisions
V.V. Rednenko, Leader of the Group
of Military and Extremal Medicine
of the Central Scientific-Research Labora-
tory of Vitebsk State Medical University
V.V. Kugach, V.I. Minkevich, Vitebsk
State Medical University

May 19. Conference-room in Hotel "Belarus"
17.15 – 18.00

SUMMING UP AND CLOSURE OF THE CONFERENCE