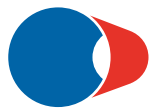
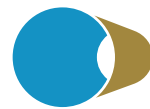


Panorama CPC



JSC Caspian
Pipeline
Consortium-R



JSC Caspian
Pipeline
Consortium-K

Caspian Pipeline Consortium Corporate Edition

№ 3 (22) September 2018



*Live
journalistic
story*
p. 1-5

Contents:

An Oasis in Astrakhan • **p. 8** / Time for New Approaches • **p. 14** / A Flagship of Oil Production in Kazakhstan • **p. 18** /
A City with National Colour • **p. 21** / Sacred Places of Kazakhstan in Glossy Magazine • **p. 26** / 'Golden Hour' Rule • **p. 32** /
CPC to First Graders • **p. 36** / Uniting the Team! • **p. 38** / Below Clouds... • **p. 41**

CONTENTS

LIVE JOURNALISTIC STORY

From Tengiz to Novorossiysk

1



IN A NUTSHELL

6

OPERATION

An Oasis in Astrakhan

8

In Line with the Schedule, without Failures

11



SAFETY

Hand in Hand

12

Time for New Approaches

14

DATE IN THE CALENDAR

A Flagship of Oil Production in Kazakhstan

18

A City with National Colour

21



EXCLUSIVE

Sacred Places of Kazakhstan
in Glossy Magazine

26

THANKS TO CPC

"We Have Not Lost a Single Person
on the Road..."

30

'Golden Hour' Rule

32

Children Get the Best!

35



As Good as in the City!..

35

With the Earnest Care

36



CORPORATE LIFE

Uniting the Team!

38

PROFESSIONALS

Below Clouds...

41

HOBBY

I Like Intellectual Games,
and This Will Last Forever!

44

IN THE RETROSPECT OF THE HISTORY

Battlefield Arteries

48



QUOTE OF THE ISSUE

*"Vivid personalities stand out not through
their smooth speeches but through their efforts
and their results."*

Albert Einstein

From Tengiz to Novorossiysk

IN AUGUST 2018, NIKOLAY GORBAN, CPC GENERAL DIRECTOR, AND VLADIMIR SHMAKOV, GENERAL MANAGER FOR FIELD OPERATIONS, TOURED ALL THE CONSORTIUM'S FACILITIES ON A WORKING VISIT.

Within five days, the company's executives flew by helicopter 1,500 km along the pipeline and conducted inspections at 15 pump stations, including unscheduled checks to assess staff emergency preparedness at each of them. The helicopter landed four times on the steel artery route: contractors' employees demonstrated to Consortium management their skills in dealing with emergencies.

IT ALL STARTS WITH SAFETY

The working visit started on August 5 at the easternmost point of the pipeline, at the Tengiz Pump

Station in Kazakhstan. After hearing reports from the pump station manager and shift supervisor, Nikolay Gorban inspected LACTs, the mainline pump house and the station's tank farm consisting of four vertical steel tanks VFRT-20000, and announced an exercise involving a tank fire scenario. A fire crew promptly arrived at the scene. It connected the fire truck to a fire hydrant professionally and competently and immediately mounted a foam attack on the "burning" object. A similar procedure, though with different simulated scenarios, was used during the visits to other CPC

facilities in Kazakhstan: PS Atyrau, A-PS-3A and A-PS-4.

Just like in the entire CPC system, great importance at the Consortium facilities in the Eastern Region is attached to labor protection and industrial safety issues. As it was reported by Mukhit Mazhenov, Eastern Region Manager, the regional team had worked 19.2 million hours with zero lost-time injuries and accidents by the beginning of August 2018.

Under the contract signed between CPC and KazTransOil in May 2018, KazTransOil units started to provide »



maintenance, repair and emergency response services for CPC-K pipeline facilities in Kazakhstan on July 1, 2018. The transfer of functions from the former contractor to the new one took place in a normal way, allowing for the safe operation of the facilities to be continued effectively.

As part of the inspection visit, a meeting was held between management of the Caspian Pipeline Consortium and KazTransOil in Atyrau. The parties discussed issues associated with equipment of respective KazTransOil units with specialized vehicles and equipment for responding to oil spills, as well as the progress in the reconstruction of Emergency Response Centers (ERCs): Tengiz ERC and Isatai ERC.

CENTRAL AND LARGEST

On August 6, CPC top managers crossed the border between Kazakhstan and the Russian Federation and continued their working tour of the facilities in the CPC Central Region located in the Astrakhan

Region and the Republic of Kalmykia. First, they visited A-PS-4A, the nearest pump station to the state border. Particular attention during the walk around the station was paid to the progress of preventive work on the station's gas turbine units, equipment of the mechanical repair workshop, condition of artesian wells, etc.

Also, an exercise with a simulated fire in a diesel fuel storage tank was conducted at A-PS-4A.

After A-PS-4A, the company's management, accompanied by Ivan Sharai, Central Region Manager, visited PS Astrakhanskaya, A-PS-5A, PS Komsomolskaya, PS-2, PS-3, and conducted unscheduled checks into preparedness of the staff and contractors for emergency response.

Apart from the station facilities, exercises were also held on the pipeline's linear part: first at the 543rd, and then at the 732nd kilometer of the pipeline. Representatives of the contractor, StarStroy,

demonstrated skills in cleaning up an oil spill and pumping the spilled oil in the deployed collectors using various oil spill response equipment.

Following the inspection of the facilities, exercises, and meetings held with specialists, the Consortium CEO noted the reliable operation of the equipment and the high professional level of the personnel.

Let us remind that after completion of the CPC Pipeline Expansion Project the Central Region became the largest in the consortium's system. Out of the six pump stations located there, five are operated by shift personnel. The sixth, PS Astrakhanskaya, will be put on a rotational basis in the near future. To this end, the station's territory will be increased, a rotational camp will be built, and new utilities will be laid there.

PERFORMANCE LEADER

On August 8, CPC management arrived in the responsibility area of



the CPC Western Region located in the Stavropol and Krasnodar Territories. The General Director inspected PS-4, PS-5, PS Kropotkinskaya, PS-7 and PS-8. The Consortium CEO inspected equipment at the stations, conducted unscheduled checks into preparedness of the staff and contractors for responding to emergencies both at the station facilities and the pipeline's linear part. In par-

From January to and including July 2018, 35.6 million tons of oil were transported via the pipeline section falling under the responsibility area of the CPC Western Region.

Sergei Potryasov, Western Region Manager, reported that a total of 19.2 million LTI-free man-hours had been achieved to date (including almost 1.4 million man-hours in 2018) and that regional vehicles

within the CPC pipeline system. Factors considered included reliability of equipment, compliance with health and safety standards, fire safety standards, and management system operation, among other criteria.

At PS Kropotkinskaya, the largest station of the Caspian Pipeline Consortium, CPC executives, inter alia, inspected a state-of-the-art pig specially designed to suite the Consortium's pipeline system.

In 2017, PS-5 in the Stavropol Territory and PS-8 in the Krasnodar Territory were commissioned, making it possible to increase the transportation volume in the responsibility area of the Western Region by 25 %.

Based on 2017 results, the Western Region team was recognized as the best in terms of performance indicators within the CPC pipeline system

ticular, exercises were held along the pipeline route, at the 1043rd kilometer of the pipeline in the Stavropol Territory and in the mountainous area in the Krasnodar Territory, at the 1485th kilometer of the Tengiz – Novorossiysk pipeline.

had traveled about 38.6 million kilometers without any recordable accidents.

It should be added that, based on 2017 results, the Western Region team was recognized as the best in terms of performance indicators

OFFSHORE AND ONSHORE

On August 9, 2018, CPC General Director Nikolay Gorban and General Manager for Field Operations Vladimir Shmakov visited the CPC Marine Terminal near Novorossiysk, where they examined the equipment of the Consortium's largest production »





Contractor's representatives demonstrating equipment to be used on the route

more than 400 meters of offshore and onshore booms, seven sets of onshore temporary storage tanks and other emergency response devices were used to protect the coastline.

After that, a scenario involving simulated depressurization of tank # 9, with oil spilling into the dike and burning within an area of 200 m², was given at the Marine Terminal Tank Farm. The on-duty fire crew with three vehicles and a volunteer fire brigade promptly arrived at the simulated fire location. The equipment was conventionally isolated, with a simulated stop of oil pumping operations. After a reconnaissance, the fire trucks were parked at the tank fire water manifolds, three hoses were run to the seat of the simulated fire, and as a result the "fire" was extinguished.

In general, the exercises received a positive evaluation from CPC management: the participants demonstrated coordinated actions in deploying emergency response equipment; the availability of manpower and resources met the regulatory level. ■

facility and conducted unscheduled checks to assess preparedness of manpower and resources for emergencies.

Thus, after arriving at the Terminal, the CPC General Director announced a scenario for emergency response teams involving a simulated offshore oil spill that occurred during loading of a tanker at Single-Point Mooring (SPM) No. 2.

According to the task in hand, during the loading operations at

the SPM where the tanker was loaded, the subsea line suffered a guillotine break, which created a likelihood of an oil fire at sea.

To fulfill the task of cleaning up the oil spill in the Marine Terminal offshore area, professional emergency response teams of Transneft-Service and Lamnalko, 18 vessels, 1.2 thousand meters of floating booms, five buoyancy tanks, and six high-performance oil collection systems were deployed. Seven units of equipment,

by Pavel Kretov



**NIKOLAY GORBAN,
CPC General Director:**

During our tour of the pipeline facilities, we placed paramount importance on the work of the fire safety units and CPC preparedness for oil spill response.

All facilities of the Consortium are in good condition, not only the new ones built within the Expansion Project, but also legacy facilities built between the late 1980s and early 2000s. You can feel a proprietary attitude at each pump station; this is gratifying and very important.

In general, the journey left a feeling of satisfaction. We had a constructive dialogue with regional specialists; a number of work issues were resolved. Despite the huge length of the pipeline system and the large geographical spread of our facilities, from Tengiz to Novorossiysk, we saw a single team of professionals who care about collective success. It means that together we can accomplish everything.

**VLADIMIR SHMAKOV,
CPC General Manager for Field Operations:**

We are constantly in touch with our on-site specialists, though this does not cancel the need for personal trips to the facilities. Remote communication is a theory, but you need practice to exercise full control of the facilities: you have to see everything yourself, touch it with your hands. Therefore, I believe that a manager of my level would need to make such visits once every six months or once a quarter.

What conclusions have we drawn from the trip? We need to continue improving our work. Just today, I held a meeting with Operations Department specialists to follow up on the trip with the General Director. We have outlined what adjustments we need to make to our documents, our response plans, what needs to be paid attention to when communicating with on-site specialists, etc.





CPC AND KTO: OPERATIONAL DISCUSSION

On August 6, 2018, a meeting of Caspian Pipeline Consortium and KazTransOil managers was held in Atyrau. CPC was represented by Nikolay Gorban, General Director, Vladimir Shmakov, General Manager for Operations, and managers of the Eastern Region. KazTransOil was represented by Aleksey Pirogov, Deputy

General Director, Erkin Nurzhau, Deputy Head of the Department for Operation and Servicing, and Kanat Baymukhanov, Chief Engineer of the Western Servicing Directorate.

The parties discussed the issues related to the companies' cooperation within the Contract for maintenance, repair and emergency servicing at the facilities of the CPC-K oil pipeline system in the Republic of Kazakhstan, which was signed in May 2018. In accordance with the Contract, the business units of KazTransOil took up the specified functions on July 1, 2018.

At the meeting the managers considered the issues of provision of the relevant units of KAzTransOil with the specialized machinery and equipment for elimination of emergency oil spillages, as well as the process of renovation of the following emergency response stations: Tengiz ERS and Isatay ERS.

It is to be recalled that the term of the Contract between CPC and KazTransOil is five years – from 2018 until 2023. The value of the Contract is about 23 billion tenge (approximately 70 million USD).

POWER SHOVEL TO GLEBOVSKOE VILLAGE

On August 9, 2018 Mikhail Grishankov, CPC Deputy General Director for Russian Government Relations, and Igor Dyachenko, mayor of Novorossiysk, officially handed over a power shovel to the Glebovskiy rural area within the hero city municipality. The event was also participated by Vasiliy Chumak, head of the Novorossiysk intercity district, and Elena Kuchera, head of the Glebovskiy rural area.

New power shovel EO-2202.1 purchased with the funds donated by CPC was added to the machinery fleet of the village. This model is irreplaceable in case of many types of excavation works, for landscaping, urban beautification and qualitative maintenance of the public areas. The power shovel can also be used in emergency services and maintenance activities at the heat pipelines, as well as at laying gas and water pipes.

In future the Company is planning to further provide the equipment to the road maintenance services of the Glebovskiy rural area replenishing their machinery fleet with the specialized equipment.



CPC has been involved in the implementation of various charitable programs in the territory of Novorossiysk for almost two decades. Starting from 2001, the municipality received assistance in the amount of over 700 million rubles. In 2018 the Consortium additionally allocated about 200 million rubles for social projects in the sphere of education, healthcare, sports and culture.



MOSCOW OFFICE WILL HAVE ITS NEW HOME

On August 14, 2018, JSC Caspian Pipeline Consortium-R and CJSC Pavlovskiy Business Center signed a lease contract for the new office premises for the CPC Moscow office in Pavlovskiy Business Center, which is located on Pavlovskaya street in Moscow.

The document was signed by Nikolay Gorban, CPC General Director, and Sergey Egorov, General Director of Central Properties LLC. According to the Contract, the total floor area of the premises rented by the Consortium in Pavlovskiy Business Center for the period of 10 years is 6,445.50 sq.m.



THIS MAKES THE EMERGENCY AID ACUTE

On August 22, 2018, Mikhail Grishankov, CPC Deputy General Director, and Aleksandr Zhilkin, Governor of the Astrakhan Region, handed over emergency ambulance cars to five medical institutions of the region. In total, 10 cars were transferred, and the Consortium allocated about 23.6 million rubles for their purchase. Limanskaya district hospital, Kharabalinakaya district hospital named after G. Khrapova, Narimanovskaya district hospital, Enotayevskaya district hospital, and Krasnoyarskaya district hospital each received two ambulance cars.

The delivered equipment is the equipment of Class B: it allows for emergency treatment activities by physician (medical assistants) team during the transportation of the patients as well as provides for the monitoring of the patient's health condition during the transfer to the inpatient medical institution. The specialized vehicles are equipped with all the required modern devices: monitor defibrillators, three-channel ECG recorders, respiratory medical devices for controlled and auxiliary lung ventilation, pulse oximeters, express glucose monitors, obstetrical sets, etc.

The equipment provided will significantly improve the quality and speed of emergency medical services provided to people who live in the remote areas of the Astrakhan Region.

During the period of 1998-2017, the Consortium donated about 928 million rubles to the charitable projects in the Astrakhan Region.



POPULATION IS GROWING

The increase in the population of red and sika deer by 12 animals was registered in the Stavropol Krai. This is due to the successful implementation of a unique ecological and educational project of JSC CPC-R – "Preserving the Native Nature." Activities on the increase of the population of these animals in the nature conservation areas were conducted within the project. The wildlife reserves were equipped with the self-feeding stations, daily patrolling was organized, hay and grain feed are stocked up to feed deer during the winter.

According to the state game wardens, at present there is an increase in the deer population in "Lesnaya Dacha" wildlife reserve by 5 animals, in "Bugutinskiy" wildlife reserve, by 4 animals, and in "Russkiy Les" wildlife reserve, by 3 animals.

An Oasis in Astrakhan

THERE IS ONE OF THE OLDEST STATIONS OF THE CONSORTIUM: PS ASTRAKHANSKAYA APPROXIMATELY ONE HOUR AWAY FROM THE REGIONAL CENTER. THIS LARGE PRODUCTION FACILITY IS SIMPLY SMOTHERED IN GARDENS.



For 30 years, the station's personnel have planted over a thousand trees and shrubberies. Today's generation of oil pipeliners carries on this tradition having turned the pump station into a real oasis in the middle of the sun-scorched steppe.

THE OLD NEW STATION

This pump station was put into operation back in 1989 on

the Guriev – Astrakhan – Grozny oil pipeline. Initially, the station formed a structural part of the Caspian – Caucasian main oil pipeline system; after that it was a part of Chernomortransneft and, finally, in the late 1990s it became a part of the Caspian Pipeline Consortium.

For sure, this facility is no longer similar to the one that was once commissioned by Soviet builders

after the upgrade performed and the Expansion Project completed. Since then, the station has lost two RVS VFRT-20000 tanks and a booster pump station, but has got hold of the shock-free start-up system, surge relief system, new electric motors, a boiler house, a metering unit, a chemical analytical laboratory, a warehouse, and a canteen. The indoor switchgear and foam extinguishing system have been upgraded as well.

During the upgrade of the fire-fighting system in 2017, the contractors installed new fittings and a pressure control valve. It is now possible to connect both the fire truck and the fire nozzle to the fire-fighting lines without wasting precious time to release pressure in the system. Nowadays, there is work in progress on a stage-by-stage replacement of the two fire water storage tanks at the station. It is planned to complete this work before the end of this year.

One of the most important work at the station was the installation of





Vladislav Kvankevich



New metering unit

a new metering unit. Even though PS Astrakhanskaya is not the first downstream station on the Russian side after the completion of the Expansion Project, it is there where the customs clearance of the foreign black gold is performed.

“The old metering unit was not designed for volumes that were pumped into the pipeline system after the completion of the CPC Expansion Project,” says PS Manager Sergey Nosov. “The pumping capacity of the new metering unit reaches 11.5 thousand m³ per hour.”

The new metering unit includes six lines, four of which are in operation. The capacity of each line is up to 2.7 thousand m³ per hour

(for comparison, the capacity of the old lines was 1.7 thousand m³ per hour). The unit is equipped

with modern ultrasonic flowmeters, which are more precise and reliable than the turbine flowmeters installed at the old metering unit.

“Turbine flowmeters required more complex maintenance; sometimes we had to clean filters several times a day,” Vladislav

Kvankevich, the Instrumental Technician, sums up disadvantages of the old equipment.

He said that when the installation of the new metering unit had been completed, a full range of tests was performed, including pressure tests; there were protections and outputs of various types of signals tested, and software debugged. Only when the station’s specialists were sure that everything was alright, they took the old unit out of service and prepared it for dismantling.

Together with the new metering unit, there was a pipe prover installed with the help of which the measuring systems are calibrated on a monthly basis.

After the upgrade, PS Astrakhanskaya is no longer similar to the facility that was once commissioned by Soviet builders

WHEN IT COMES TO QUALITY

The metering unit monitors the transported volumes of oil, its viscosity, density, and water content parameters. The sampling skid of the metering unit automatically takes samples, which are then analyzed in a testing laboratory. »



Sergey Nosov

In spring 2017, the laboratory staff had on-the-job new-home celebration as they moved to a new spacious building. This building has excellent conditions for work: a separate room is provided for each type of analysis; there is a sufficient number of vent hoods, wash-up rooms, warehouses for chemical agents and state standard reference samples.

“In Russia, there are few enterprises, whose laboratories could be a match for CPC in terms of technical capacity,” says Anastasiya Semenova, the Testing Laboratory Quality Engineer. “We have the latest automatic chromatographs, devices to determine fraction levels and saturated vapors.”

Excellent conditions were also created for accommodation of the laboratory staff: there is a spacious cloakroom, shower room and



In the CPC system, this pump station is famous for its fruit orchard, ornamental shrubs and flowering beds

HOME AWAY FROM HOME

This high-tech oil pump station, which is also famous for its fruit or-

chard, ornamental shrubs and flowering beds, keeps on transforming. Preparations are being made here for the construction of a shift camp, which will allow switching

PS Astrakhanskaya team to work on rotation. To do this, the territory will be enlarged, new utilities will be installed, and additional trees will be planted. All this will require even more effort and attention of the personnel. However, one day in spring, walnut, apricot, and plum trees will burst into blossom with renewed vigour within the territory of this beautiful and modern oil transport facility. It is easy and pleasant to work in such beautiful place where every employee is at home away from home! ■

At PS Astrakhanskaya, the customs clearance of the black gold coming from Kazakhstan is performed

coffee room. By the way, representatives of the third-party audit firm who checked the HSE management system at PS Astrakhanskaya in July 2018 duly estimated all these aspects.

chard, ornamental shrubs and flowering beds, keeps on transforming.

Preparations are being made here for the construction of a shift camp, which will allow switching

by Pavel Kretov



Inna Tusuphazieva



Anastasiya Semenova



In line with the schedule, without failures

ON AUGUST 24, THE MAIN PIPELINE OF THE CASPIAN PIPELINE CONSORTIUM WAS PUT BACK INTO OPERATION AFTER A SCHEDULED 72-HOUR OIL PUMPING SHUTDOWN.



The work on maintenance, repair and connection of the facilities, which is possible only in case of a full shutdown of the pipeline, was conducted for three days.

This was the second planned shutdown in 2018 aimed at performing work to comply with the specified operational parameters and reliability requirements to the CPC oil pipeline system. Compared with the shutdown in May 2018, a much increased scope of work was conducted along the entire oil pipeline.

For instance, the designed solutions for the scheduled replacement of the ball valves were implemented on Tengiz, Komsomolskaya, Kropotkinskaya oil pumping stations, as well as on the process oil pipelines of the tank farm and shore facilities of the Sea terminal.

Renovation of the section of the inlet header together with laying a pipeline was conducted on "Astrakhanskaya" oil pumping station to ensure maximum flow efficiency of the oil pipeline. The connection and commissioning of a single-point mooring (SPM-1) were carried out at the Sea terminal of the Consortium after the overall replacement of the sea floating pipelines.

Well-coordinated work of the Consortium personnel and the contractors involved, strict compliance with the occupational safety rules and thorough preliminary work

contributed to the implementation this technologically complex process in line with the schedule, without a failure. At present, oil is being transported on a scheduled basis. ■

by Pavel Kretov

VLADIMIR SHMAKOV, CPC General Manager for Operations:

"CPC's pipeline is in operation 24/7. As not all the equipment can be replaced or maintained with the oil pumping ongoing, we shut down the pipeline for 72 hours two times a year. This time we performed a great deal of work on technical maintenance, software replacement and re-adjustment of the new logic.

All activities were completed in compliance with the approved method statements due to the well-coordinated work of specialists from all the Company's units."



Work progress in the Central Region



Hand in Hand

IN MID-AUGUST 2018, COMPREHENSIVE EMERGENCY TRAINING EXERCISES WERE HELD IN THE AREA OF VOLGA-AKHTUBA FLOODPLAIN, ASTRAKHAN REGION, JOINTLY BY CPC-R CENTRAL REGION EMERGENCY RESPONSE FORCES AND THE MAIN DIRECTORATE OF THE MINISTRY OF EMERGENCY SITUATIONS (MES) OF RUSSIA FOR THE ASTRAKHAN REGION WITH INVOLVEMENT OF THE LOCAL SUBUNIT OF THE RUSSIAN UNIFIED EMERGENCY RESCUE SERVICE (RUERS).

1



2



3



4

The command to proceed with the tasks of the exercises was given personally by Governor Aleksander Zhilkin who arrived at the site and acted as Chairman of the Commission for Emergency Prevention and Response and Ensuring Fire Safety under the Government of the Astrakhan Region.

A total of 225 people and 54 units of equipment were involved in the exercises, including MI-8 helicopter of the Ministry of Defense.

According to the exercise script, at 6 a.m. the Supervisory Control and Data Acquisition System (SCADA) detected pressure drop in the oil pipeline in the section between

547 and 573 km. The dispatcher of the CPC Operations Control Center located near Novorossiysk simulated the shutdown of oil pump stations, remotely isolated the alleged pipeline emergency section and reported the situation to the management of the Consortium and CPC-R Central Region.

The Security response team and a standby vehicle of the Emergency Response Center headed to the "emergency" site and found a simulated oil spill that resulted from unauthorized earthwork in the protective zone of the Tengiz-Novorossiysk main pipeline. It was found that the oil was coming out of the pipeline near the river crossing

on the right bank of the Akhtuba River.

The information about the accident was also promptly communicated to the supervisory bodies, Ministry of Emergency Situations and bodies of the Ministry of Internal Affairs. The emergency response activities were performed in compliance with the developed plan for oil and oil product spill prevention and response.

The participants in the exercises deployed five lines of floating booms on the river, and deployed a temporary onshore station for oil spill containment. Thanks to the prompt and well-coordinated work of



the emergency response services, they succeeded in containment and elimination of the simulated oil spill, and in repairing the pipeline damages.

During the exercises, CPC structural units and the involved forces of the Ministry of Emergency Situations were given an additional scenario inject: burning of the spilled oil with two firefighters “injured” while extinguishing the fire. The Service for Disaster Medicine provided medical assistance to the simulated injured persons and arranged their evacuation to the medical institutions.

Actual oil spill response measures were practiced during the exercises: deployment of floating booms, oil collection from the water surface with oil skimmers, mechanical



and manual collection of contaminated soil, and use of back-up sorbent sprayers. Temporary tanks were deployed for oil collection. Laboratory specialists collected soil samples and performed an express analysis for oil and oil product content. In addition, emergency crews have practiced pipeline leak integrity restoration methods.

The conducted training was highly praised by observers: CPC has the required forces and equipment for containment and response to potential emergencies at its facilities, resources were deployed within the established time limit, CPC and contractors' personnel demonstrated good level of training and skills in using emergency response equipment. ■

by Pavel Kretov



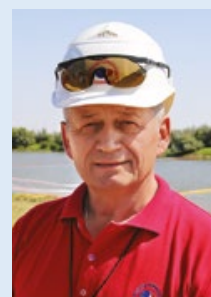
IGOR EVSTAFIEV,
Major General of
Internal Service,
Head of the Main
Directorate of
the Ministry
for Emergency
Situations of
Russia for the
Astrakhan Region:

“We conduct such exercises together with CPC-K every two years in the Astrakhan Region, and the Consortium itself conducts them every year. During the exercises, we practice interaction among organizations, local administrations, units of the Ministry of Emergency Situations and other services involved in possible accident response at hazardous production facilities.”



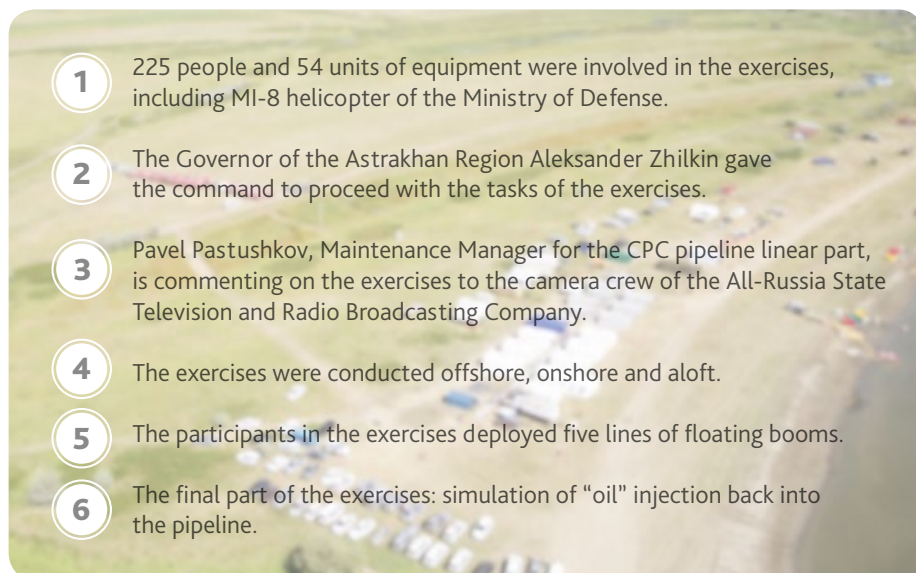
IVAN SHARAY,
Central Region
Manager:

“CPC business units conduct training exercises on a regular basis practice the actions until they become automatic and to meet abnormal situations head-on. Every week we conduct exercises at our pump stations. Once every three months we conduct them at the linear part of the main oil pipeline. What you can see now is Lessons Learned of holding similar exercises.”



SERGEY KOPYLETS,
Senior Engineer
for Civil Defense,
Emergency
Situations,
Oil Spill Response
and Fire Safety:

“This training exercises demonstrated well-coordinated work of all the services involved, and showed that they are all ready for emergency response and recovery.”



- 1 225 people and 54 units of equipment were involved in the exercises, including MI-8 helicopter of the Ministry of Defense.
- 2 The Governor of the Astrakhan Region Aleksander Zhilkin gave the command to proceed with the tasks of the exercises.
- 3 Pavel Pastushkov, Maintenance Manager for the CPC pipeline linear part, is commenting on the exercises to the camera crew of the All-Russia State Television and Radio Broadcasting Company.
- 4 The exercises were conducted offshore, onshore and aloft.
- 5 The participants in the exercises deployed five lines of floating booms.
- 6 The final part of the exercises: simulation of “oil” injection back into the pipeline.

Time for New Approaches

FROM JULY 10, 2018, THE NEW THIRD EDITION OF THE CONTRACTOR PERFORMANCE EVALUATION PROCEDURE WAS BROUGHT INTO FORCE BY ORDERS OUT-B-CPCR-0101-2018 AND OUT-B-CPCK-0036-2018 DATED 15/6/2018.

The article was prepared by:

Grigory Senoedov,
CPC Economic
Security Manager

Elena Medvedeva,
Economic Security Specialist,
Security Service



FROM FORM TO CONTENTS

Key amendments made to the new revision of the Contractor Performance Evaluation Procedure are as follows:

1 The evaluation forms have been changed:

Evaluation Form Description	Was (Rev. 2)	Is (Rev. 3)
Technical Evaluation	Form A	Form A
Contractor Questionnaire	Form B	Form A-1
Field Audit Certificate	Absent	Form A-2
HSE Assessment	Table A1 to Form A	Form B
HSE Questionnaire	Absent	Form B-1
Safety Assessment	Form C	Form C
Expert Evaluation of the Financial Department	Form D	Form D
Expert Evaluation of the Legal Department	Form E	Form E
Final Expert Evaluation of the Contractor	Form F	Form F
Audit Results Summary	Form G	Excluded

2 The expert evaluation is now performed in two phases: preliminary expert evaluation, which includes technical evaluation and evaluation by HSE criteria, and main expert evaluation, which includes financial assessment, safety assessment and legal assessment.

3 There have been several types of evaluation identified:

✓ General-procedure evaluation that is conducted for potential contractors, the aggregate value of contracts with which exceeds the amount equivalent to USD 50,000 per year;

✓ Simplified evaluation procedure is carried out only by the Security Service and is applied:

a) To all contractors if the value of expected contracts is less than USD 50,000;

b) If the contractor is classified as a high rating company (the full list of ratings of reputable agencies is available on the Security Service page and in the Economic Security section);

c) If the contractor is one of the monopolies;

d) If the contractor is CPC shareholder or its subsidiary (with a 100% equity share of such shareholder).

✓ The evaluation for affiliation/conflict of interest is also performed only by the Security Service for charity agreement contractors with participation of charity agreement administrators.

4 There have been implemented easy-to-understand and clear evaluation criteria, which eliminate duplication of expert functions, and are also aimed at reducing the influence of a human factor on the final evaluation in the relevant areas.

- 5 Provisions governing the procedure for and form of field audit have been introduced.
- 6 The set of documents requested from the potential contractor have been modified; excessive requirements are excluded.
- 7 Switch to electronic document management has been provided.
- 8 The administration functions of the Contractors' Expert Evaluation Database have been transferred to the Security Service.
- 9 The expert evaluation review mechanism has been provided for by convening the Conciliation Commission for exceptional cases.
- 10 The evaluation findings and their period of validity: now there are only two types of evaluation: 'approved' or 'not approved', which are valid for 2 years; the option of the 'approved with restrictions' rating has been excluded. In case of approval of the participant the expert may recommend that several additional terms and conditions be included in the contract to minimize the risks for CPC, such as limiting the advance payment amount, terms of delivery or payment, etc.
- 11 The provisions governing switching to the Automated Evaluation System have been provided.
- 12 The basis for continuous intermediate monitoring of contractors included in the Expert Evaluation Database with the use of the Automated Evaluation System has been laid down.

EXCLUDING A SUBJECTIVE APPROACH

Currently, a set of measures is being performed aimed at automation of such business process as the Due Diligence procedure: the implementation of the Automated Evaluation System.



Elena Medvedeva



Grigory Senoedov

The Automated Evaluation System is designed to carry out most part of the potential contractor evaluation on the basis of preprogrammed algorithms using a large number of external and internal sources. The main objectives of the Automated Evaluation System implementation are efficient use of the experts' working hours, exclusion of biased evaluation and minimization of a human factor, processing of a large amount of data, constant monitoring of suppliers included in CPC database, and interaction among various operating systems and software packages used by various CPC business units at the moment.

Persons responsible for the implementation of the Automated Evaluation System development and application project are personnel of the Security Service Economic Division. In order to implement this project, a Taskforce Group was formed that included experts directly involved in Due Diligence and representatives of the departments concerned. At present, the information products market has been monitored, and a primary analysis of suppliers and manufacturers has been performed. The experts have sent proposals for including possible criteria for evaluating contractors subject to automation to the persons in charge. The development of the Task Order and description of the detailed algorithm for the Automated Evaluation System is in full swing, subject to the provisions of the Procedure and other internal CPC regulations.

AVOIDING RISKS

Expert evaluation is a rather time-consuming process, since experts in functional areas need to process and analyze quite a large amount of information contained in documentation sets supplied by the contractor. They also have to refer to a large number of open data sources to give a comprehensive and unbiased »



evaluation, which is primarily intended to assess risks and threats for CPC when working with a potential contractor, and to propose a number of measures to minimize them. Thus, the process of expert evaluation of the contractors is one of the key supporting processes for CPC functioning intended to ensure the smooth company's operation.

Referring to the statistics, the following data can be given.

In 2017, experts of the Security Service, Financial and Legal Departments performed 506 audits of counterparties, among them:

- Russian legal entities – 407 (80%);
- Legal entities of the Republic of Kazakhstan – 86 (17%);
- Other foreign legal entities – 13 (3%).

The structure of audits performed according to the venue of legal entities is shown in Figure 1.

LEGAL ENTITY AUDITS PERFORMED

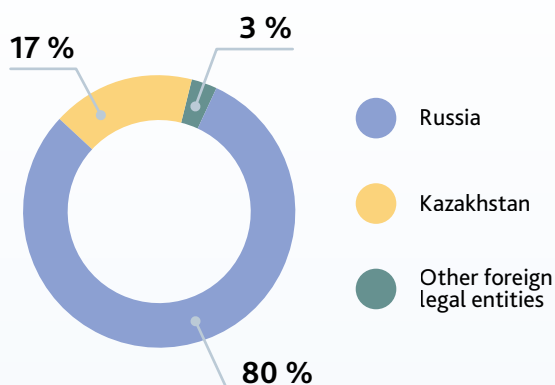


Fig. 1. The structure of counterparty audits performed according to the venue of legal entities

In 2017, as compared to 2016, the number of audits performed increased by 24.94% (see Figure 2).

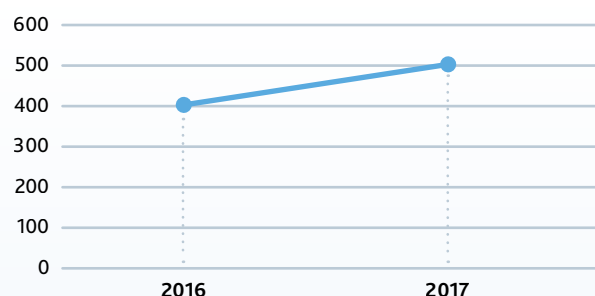
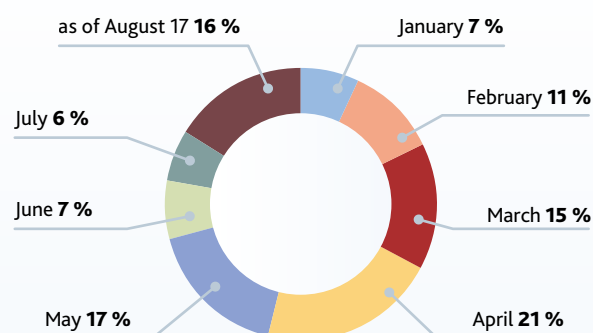


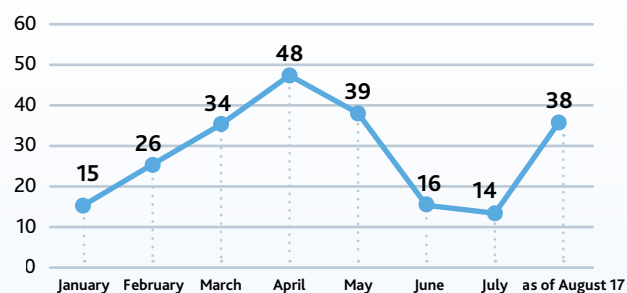
Fig. 2. The trend of audits performed in 2016–2017

In 2018, as of mid-August, more than 300 audits were performed:

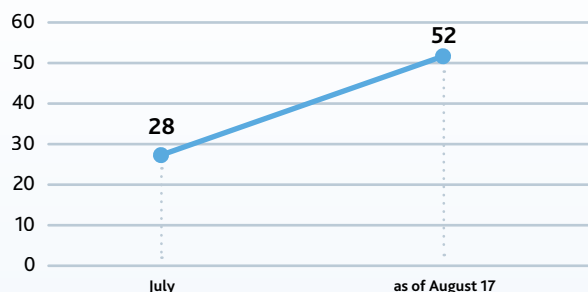
DUE DILIGENCE JANUARY–AUGUST 17, 2018



NUMBER OF AUDITS



NUMBER OF AUDITS AS PER SIMPLIFIED PROCEDURE



In August 2018, when the new revision of the procedure had come into force, the number of audits significantly increased: the number of audited contractors for the half of August has already exceeded the average monthly value for the year. Moreover, there were audits as per the simplified procedure added, the number of which is also increasing.

Following the simplified audits, more than 14% were rejected. This demonstrates the effectiveness of the procedure used, since it was these 14% of potential suppliers that threatened the CPC activities.

Supplier audits as per the simplified procedure are performed on the basis of criteria, which are recommended by the Federal Tax Service of Russia in terms of unreliability of contractors, risk assessment, including risks for taxpayers, signs of unreliability of information and of the so-called fly-by-night companies, and which are approved by the laws and regulations of the Federal Tax Service of Russia and the Ministry of Finance of Russia.

A BIT OF STATISTICAL DATA

According to the data from the Federal Tax Service, which has been fighting very hard against fly-by-night companies from 2016, within two years the number of legal entities in Russia has decreased by 11% due to the “cleaning up” of the Uniform State Register of Legal Entities from shell companies. During the period under review, there was an unprecedented decrease in the number of companies established to perform illegal activities:



avoiding tax payments, money laundering, cashing and withdrawal of funds abroad. The number of fly-by-night companies decreased to 309.5 thousand, which is 7.3% of the total number of companies as of July 2018 according to the Federal Tax Service. In early 2016, there were significantly more of such organizations: 35.5% or 1.6 million companies. In 2011, about 40% of Russian enterprises could be classified in this category. As of July 1, 2018, there were 4.2 million legal entities in total registered in the Unified State Register of Legal Entities, as compared to 4.5 million a year earlier.

MEDIA COVERAGE IS IN FOCUS

In addition to audits based on the above-specified criteria and in accordance with the provisions of the Due Diligence Procedure, the Security Service regularly conducts global studies of media coverage of CPC, major suppliers and partners, and examines current problems of the industry in Russia and abroad. The results of such studies are published on the Security Service page in the Economic Security section.

At the moment, the Security Service specialists have prepared reports on security (security assurance) of facilities of Gazprom, Rosneft, Transneft, Chevron, Exxon Mobil, Shell and some others, as well as on environmental issues, environmental protection and occupational safety issues in the fuel and energy sector. ■





A Flagship of Oil Production in Kazakhstan

AT THE END OF AUGUST, THE CITIES OF ATYRAU AND FORT-SHEVCHENKO BECAME THE CENTERS OF HOLDING FLAGSHIP EVENTS IN HONOR OF THE 25TH ANNIVERSARY OF THE NORTH CASPIAN PROJECT, THE UNIFIED OPERATOR OF WHICH IS NORTH CASPIAN OPERATING COMPANY (NCOC).

25 YEARS OF SUCCESS

The Shareholders of the Company, representatives of the Ministry of Energy of Kazakhstan and other state authorities, old-stagers of the project, former managers, as well as the managers of CPC, TCO, KPO, and EMG were invited to celebrate the anniversary of the project. For the guests of the event, a research-to-practice conference, there were organized a visit to the Kashagan Exhibition Center, meeting of the project old-stagers with NCOC employees, musical competition among local singers and gala concert.

Kairgeldy Kabyldin, Deputy General Director for Republic of Kazakhstan Government Relations, took part in the jubilee celebration on behalf of CPC-K. He conveyed the congratulatory message of Nikolay Gorban, General Director of the Caspian Pipeline Consortium, as follows: "We expect that the volume of oil

pumped from the Kashagan field through the CPC system will nearly double in the current year compared with the previous year. As you known, the increase in the CPC's key performance indicators became possible thanks to the implemented Tengiz-Novorossiysk Pipeline Expansion Project.

Kashagan is the first offshore oil field in Kazakhstan and one of the three largest deposits in the world discovered over the past 40 years

We are very much honored to have NCOC among our reliable partners, which is an operator of a strategically important project for Kazakhstan. I have no doubt that NCOC specialists' professional competence and expertise will immeasurably contribute to the affair of great moment for the country ensuring the effective development of Kazakhstan oil and gas sector in the global markets."

IN HONOR OF A POET

The North Caspian Project is devoted to the exploration and development of several offshore oil and gas fields in Kazakhstan, among which Kashagan is the largest. This is the first offshore oil field in Kazakhstan and one of the three largest deposits in

the world discovered over the past 40 years. This natural source of hydrocarbons was named in honour of Kashagan Kurzhimanuly, a famous poet, singer and narrator of the XIX century in the Mangistau Region in the year of celebration of his 150th anniversary. Nowadays, experts estimate the Kashagan field reserves at 4.5 to 5.5 billion tonnes of oil and 3 trillion cubic meters of gas.

Offshore development and production of oil and gas resources are substantially a complex process. However, the singularity of the Kashagan project lies in the fact that the work under this project is performed even in more severe conditions. The deposit is characterized by high geostatic pressure, and it is rich in hydrogen sulphides and mercaptans. Kashagan is a shelf ecologically sensitive area with an unfavorable combination of shallow-water conditions. Exploration works become even more complicated due to the deep oil formation depth – at a level down to 4,800 m. Unfortunately, there is still no global practical experience of performing work in such conditions. All these factors, of course, become the major obstacle to the comprehensive development of the field.

A VIVID EXAMPLE OF INTERNATIONAL COOPERATION

On the day of the formal presentation of the Kashagan field, President of Kazakhstan Nursultan Nazarbaev called it the landmark event for the world energy industry, and the North Caspian Project was called a bright example of efficient international cooperation.

“It is a story of great success! A vivid example of our cooperation with the foreign partners is the commissioning of the Kashagan field. I can say on behalf of Kazakhstan, and I can declare on behalf of the Consortium that they are starting to develop a large oil and gas field of Kashagan,” the President said in his speech.

Even now, one can confidently say that the project, despite many complexities and challenges in the field development, justifies all the investments and is a flagship of the Kazakhstan oil production. In the jubilee year for the project, the expected profit from commercial production at Kashagan can significantly change the quality of life and welfare of citizens of Kazakhstan. The earned profit will be used to implement

large projects in the area of social, transport and industrial infrastructure. The volume of oil produced at Kashagan is already 16 to 17 million tonnes per year. The potential of the Kashagan field is rated at 60 to 70 million tonnes, whereas at present only 80 million tonnes of oil is produced in the whole Kazakhstan.

The potential of the Kashagan field is rated at 60 to 70 million tonnes, whereas at present only 80 million tonnes of oil is produced in the whole Kazakhstan

By 2023, the third expansion of the Tengiz project will be completed, where 38 to 39 million tonnes of oil will be produced. By that time, the second phase will commence at the Kashagan field, and by 2030 oil production there is expected to be 100 million tonnes of oil per year.

FROM THE HISTORY OF KASHAGAN

Exploration works at Kashagan have been conducted since 1992. At that time, at an extended session headed by President of the Republic of Kazakhstan Nursultan Nazarbaev with the participation of the Government members, oilmen and geologists, the question was raised about the further development of the oil and gas industry in the country. The task was set to organize offshore exploration in the Caspian, as even the Soviet geophysicists spoke about its hydrocarbon potential.

A little later, in 1993, a special-purpose state-owned company KazakhstanCaspyShelf was established. About 50 international companies sent their bids to participate in the project. But only a few of them got the opportunity to participate in it. Each of the participating companies had an authority in the global oil and gas industry, and their solutions and equipment turned out to be a good school for Kazakhstan specialists. Their experience and conduct of business contributed to

the successful start of exploration works in the Caspian.

An agreement was signed to establish an international consortium to estimate the hydrocarbon potential of the Kazakh sector of the Caspian Sea. Such companies as Adzhip, Shell, Mobil, Total, British

Gas, British Petroleum and Statoil were included in its structure. It is important to note that Kazakhstan provided maximum state support and attention to these companies in the period of their involvement in the project. But the state itself, in turn, gained benefit and advantage. Since the beginning of effect of the Production Sharing Agreement (PSA), subsoil users have paid about 1.9 billion dollars of bonuses to Kazakhstan. Until the end of the agreement term Kazakhstan's income will be increased by almost 25 billion dollars based on the oil price of USD 50 per barrel.

IMPRESSIVE RESULTS

Thanks to the project, more than 500 million dollars has been »



invested in the social and infrastructure development of the Mangistau and Atyrau Regions: kindergartens, schools, hospitals, sports complexes, hostels, roads have been built, and settlements have been supplied with gas. In 1995, in the village of Bautino, a desalination plant for drinking

than 180 companies in Kazakhstan, in particular, their employees to receive training and obtain certificates in accordance with the international standard, thereby increase their competence and overall performance. At present, 274 companies are working at the Kashagan project

helped in solving the problem with employment.

By 2023, the third expansion of the Tengiz field will be completed, where 38 to 39 million tonnes of oil will be produced. By that time, the second phase will commence at the Kashagan field, and by 2030 oil production there is expected to be 100 million tonnes of oil per year

water was commissioned, and in Atyrau an artificial kidney apparatus was installed. A sturgeon breeding plant was also constructed and put into operation.

As part of the plans to establish a marine service infrastructure around Kashagan, Ersai and Caspian Offshore Marine Construction industrial enterprises that manufacture large-capacity steel structures were put in operation. A ship-repair plant in Bautino village, a marine support base and oil spill response base were commissioned as well. In addition, about 70 joint ventures were formed, which included such international companies as Schlumberger, Siemens, Energy Wood Group, and Saipem. Their knowledge, experience and solutions helped more

with Kazakhstan holding more than 50 % shares.

As ExxonMobil President Darren Woods noted during one of his visits to Kazakhstan, working as a single team, the company can achieve a lot in partnership with the republic. "We shall continue to provide technical skills and best practice to local staff. And we will drive Kazakhstan to global leaders. Kashagan plays a special role in this process," he said.

RELYING ON LOCAL RESOURCES

The NCOC Consortium has become one of the largest employers in Kazakhstan, since the facilities erected and commissioned by this company

To date, the work on the implementation of the Consortium's social projects is successfully ongoing. Moreover, in order to replace foreign personnel in the project with employees from Kazakhstan, in 2015–2017, NCOC implemented a special program to increase the number of local employees. The company also implements a scholarship program on educating Kazakh citizens in higher education institutions. In addition to the implementation of professional education and development programs for local personnel, considerable funds are invested in the construction of public infrastructure facilities in the fields of education, health, sports and culture, power, gas and water supply.

Of course, the development of the Kashagan field involves a number of challenges that require the use of innovative solutions. Methods of introducing modern equipment and new approaches to production used for the first time at Kashagan become pivot points for a number of technological breakthroughs.

The Production Sharing Agreement in the North Caspian is valid until 2041. However, the question to extend it is already being raised. ■

by Aina Zhetpisbaeva



A City with National Colour

ASTANUSHECHKA. THIS IS THE TENDER WAY THEY CALL A YOUNG, FAST-GROWING AND STATE-OF-THE-ART CAPITAL OF KAZAKHSTAN. THIS YEAR, ASTANA WHERE ONE OF THE REGIONAL OFFICES OF THE CASPIAN PIPELINE CONSORTIUM IS LOCATED, CELEBRATED ITS TWENTIETH ANNIVERSARY.



Astana today is a city with a dynamic pace of life. Astana citizens are always in a hurry, they are quick, and in this context the life of people of other regions seems to be running more slowly and quietly.

However, it is true that in the very beginning of Astana development, the city did not take a liking of everyone. The city could not simply take the fancy of newcomers with its greyness, inhospitality, cold autumn days and frosty winters. The only thing that attracted people there was the opportunity to get education and find a good job. The capital was just standing start, and its territory concentrated main administrative and government departments.

300 thousand people lived in the newly declared capital, and its

area was only 258 km². However, every day the city sprawled, developed and transformed. Within two decades, Astana has reached the status of a millionaire city, and its area has expanded to 797.33 km². Many beautiful, interesting places

ON A SCALE OF KHAN SHATYR

Probably, every guest of the capital tries to visit Khan Shatyr Entertainment Center. What does this phrase mean? Similar to the names of Tsar

Within two decades, Astana has reached the status of a millionaire city, and its area has expanded to 797.33 km²

emerged there, which become attractive to citizens and visitors.

New architectural masterpieces that amaze with their might and beauty are constantly being erected here. If you come to Astana, you must visit these places.

Bell or Tsar Cannon, Khan Shatyr in Kazakh means a supreme ruler, the khan among the tents.

The uniqueness of this facility is that it is the largest tent in the world; its height to the spire is 150 m, and the total area is 127 thousand m². »

Our colleagues, Gulzhan Musagalieva and the author of this article Aina Zetpisbaeva like to go for a walk around the Nürzhol (Star Trek) Boulevard where the CPC office is located



State Opera and Ballet Theatre Astana Opera

Khan Shatyr, a work of the famous British architect Norman Foster, was presented in 2010 as part of the celebration of the birthday of the capital. The building is made as a spire, the stretched steel cables of which hold a special transparent fabric. Khan Shatyr is rated as an eco-building, since its fabric is covered with a special chemical compound that protects the tent space from temperature differences and contributes to preserving special micro-climate.

There are shops, a supermarket, offices, cafes, restaurants, playgrounds, family parks and cinemas under the dome of the tent.

The favorite place of Astana citizens is an indoor water park. An artificial beach functions here at any time of the year where a tropical climate with a temperature of 35°C is always maintained, and sand is delivered from the Maldives. Therefore, if you want to drop into the Maldives for a while, you are welcome here!

FOLLOWING THE STAR TREK

Nurzhol (Star Trek) Boulevard, popularly known as the Water-Green Boulevard, is also one of the main attractions in Astana. The Boulevard located in a new administrative and business center of the capital begins

from the President's residence Ak Orda and reaches Khan Shatyr Entertainment Center.

The Boulevard was designed by Kisho Kurokawa, a renowned Japanese architect. The considerable part of the Boulevard is built as a three-level structure. At the lower level, there is a parking lot for 400 cars; the second level contains shops, service and public catering centers, show-rooms, offices and other public establishments. On the upper level, there is a pedestrian area with avenues, flower beds, lawns, trees, benches, fountains, and small architectural structures.

It is worthy of note that it is on this Boulevard that the CPC office in Astana is located. Employees of the Department of Government Relations with the Republic of Kazakhstan work here.

SCOPE OF ACHIEVEMENTS

Undoubtedly, an outstanding event not only for Astana citizens, but also for the entire Kazakhstan was the holding of the first international exhibition EXPO-2017. The main architectural symbol of the exhibition



Astana Bayterek is a World Tree that symbolizes the state, which has preserved its historical roots

was the eight-floor structure in the form of a sphere: Nur Elem (Ray of Peace) Sphere with a height of more than 100 m and a diameter of 80 m.

The Kazakhstan Pavilion was located on the first floor of the building where the visitors got acquainted with the history, culture, traditions, attractions, and the latest achievements of the republic.

Astana Bayterek monument rising above the city is an architectural landmark of the capital. Bayterek means a young, strong, growing tree that symbolizes the state, which has preserved its historical roots,

a globe, which is 22 m in diameter and weighs 300 tonnes. It is made of chameleon glass that changes colour depending on the sunlight. The globe is lifted to a height of 97 m. The main idea that Astana Bayterek monument conveys is the World Tree, which connects the three main levels of the universe: lower (the underworld), middle (the terrestrial world) and upper (the heavens). From there, from a bird's eye view, the entire city can be viewed.

If you come to Astana, be sure to visit Mangilik El (the Country of Eternity) Triumphal Arch. This architectural structure was built in honor of the 20th anniversary of Kazakh-

New architectural masterpieces that amaze with their might and beauty are constantly being erected in Astana

has a secure foothold and looks to the future. This is an architectural structure made of metal, glass and concrete. The structure, which is 105 m high and weighs more than 1,000 tonnes, is installed on 500 piles. The monument is crowned by

stan's independence. The height of the construction reaches 20 m, which symbolizes 20 years of Kazakhstan's existence as an independent state. The Arch pedestals hold recesses, in which there are statues that reflect the mentality of



Stunning Khan Shatyr

the Kazakh nation. For example, to the left of the arched passage there is a sculpture of Aksakal, a symbol of wisdom, a reflection of the holder of spirituality and public ideas. To the right of the arched passage there is a statue of the Woman – Mother-Guardian of the hearth.

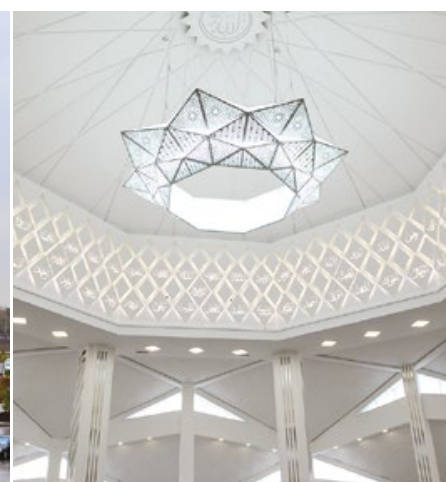
Inside the arch, as you climb the staircase, you can see landscape, chronicle and genre photographs, which depict the history of the city.

SPIRITUAL VALUES

I would recommend to the high art admirers to visit Astana Opera, »



The Palace of Peace and Reconciliation is built in the form of a pyramid that harmonizes the environment



The Flower of the Holy Father is a mosque that can accommodate 750 people at a time

the State Opera and Ballet Theatre, because this theatre is considered one of the best in Europe due to its architectural look, beauty and acoustic capacity. A team including architects, builders and specialists from 33 countries worked at the exterior and interior of this temple of Melpomene. The floor, walls, decorative panels and spiral marble staircases of the foyer are decorated with mosaic Sicilian marble. The Theater is recognized as a monument of architecture of national importance.

A building of the Palace of Peace and Reconciliation, or the Pyramid,

is a symbol of friendship, unity and peace in Kazakhstan. The area of the pyramid base is 62×62 m, and its height is also 62 m. The apex of the pyramid is adorned with a true piece of art by artist Brian Clark: a stained glass incorporating 130 doves that symbolize the number of nationalities living in Kazakhstan.

The idea of construction of this facility was to create a place where the Congress of Leaders of World and Traditional Religions could be held. The pyramid embodies the desire of a young independent state for peace and accord. This idea was proposed by the President of

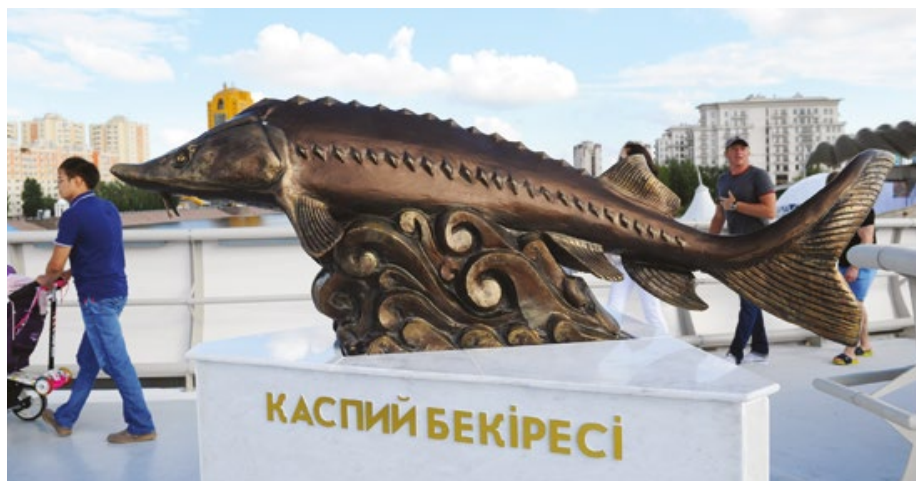
the Republic of Kazakhstan Nursultan Nazarbaev at the First Congress of Leaders of World and Traditional Religions, which was held in Astana in 2003 and became a landmark of the early 21st century.

This year, in anticipation of the worldwide Muslim Holy Month of Ramadan, a new Allany Guli (the Flower of the Holy Father) mosque was built in Astana. On the outside, the design of the building resembles a flower and, at the same time, facets of a diamond.

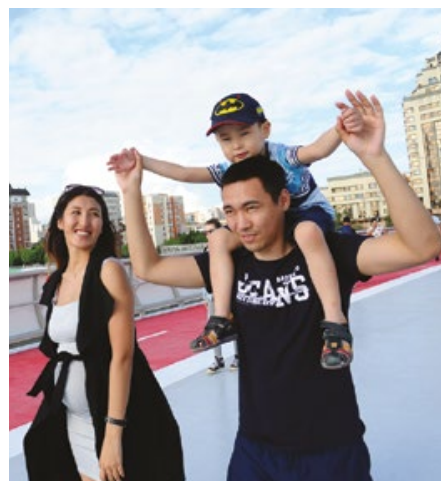
This mosque is one-of-a-kind throughout the world. It can



Nur Elem (Ray of Peace) Sphere



A monument to the Caspian sturgeon is installed on the Atyrau Bridge



Astana citizens love their city!

accommodate 750 people at a time. The mosque was erected by the aid of charity contributions.

The uniqueness of the mosque lies in the fact that the building uses alternative energy sources: solar cell panels. The building is an example of post-modernism style with the use of traditional decor and picturesque elements.

GIFT FOR ANNIVERSARY

On the eve of the 20th anniversary celebration, Astana received a remarkable gift from the authorities of the Atyrau Region – Atyrau

Bridge. The exterior lining of the Bridge is made of triangular aluminum cassettes, which create protection against atmospheric precipitation and ensure safety. In the central part of the circular descend there is a public space made in the form of a lozenge shed tent. The total length of the Bridge is 313.5 m. The structure includes a six-meter pedestrian walkway, three-meter bicycle lane, 0.5 m wide safety zone and two 0.5 m lanes for pedestrian railings. The structural steel weighs 1,920 tonnes.

There is a monument to the Caspian sturgeon, a landmark of the city of

Atyrau, installed on the Bridge. By the way, sturgeon is one of the most expensive fish on the planet. The cost of a kilogram of sturgeon caviar in the world markets is several thousand dollars.

I have described only a small part of Astana's sights. If you have time, you should definitely make more visits to beautiful and interesting places and get to know our Astanushchka! ■

*by Aina Zhetpisbaeva
Pictures by Sultan Seitov*



Unique Atyrau Bridge is a gift to the 20th anniversary of Astana

Sacred Places of Kazakhstan in Glossy Magazine

People in more than 80 countries read National Geographic magazine in 38 world's languages. Two years ago in the Central Asia region, they began to publish this magazine titled National Geographic Qazaqstan in the Kazakh language. In 2017 and 2018, with the support from Caspian Pipeline Consortium-K, Joint Stock Company, all schools in the Atyrau Region began to receive a world-known magazine on a free basis.

“...Kazakhstan – its area can enclose 5 Frances, 3 Turkeys and 5 Japans. There are about 25 thousand historical monuments here, and all of them are unique in their own way...” One can find these wonderful lines about our country in the National Geographic Qazaqstan magazine. The bright glossy pages of the print

publication that has a 128-year timeline incorporate fancifully headed images of animals: Ит жылының талап етегі – адалдық (Honesty will be Required in the Year of the Dog) or Аяғы жоқ, қолы жоқ (Without Hands and Without Legs) (about reptiles). One can also read about “zhauzhurek” – a precious heritage of Kazakh traditions, and about historical sacred places of Kazakhstan.


Today the National Geographic magazine representatives are on a visit to Panorama CPC. Our colleagues shared beautiful pictures and their vision of natural treasures of Kazakhstan. ■

by Aina Zhetpisbaeva

NATIONAL GEOGRAPHIC, exclusively for Panorama CPC



Zhumbaktas (meaning 'sphinx') is a rocky mushroom-shaped island that rises 65 ft above the lake's surface in Burabay National Park



Legend states that once upon a time, long ago, a king owned a huge (male) camel, so big it was like a mountain. This camel could smell the king's enemies and tell him where they were. Whenever the king rode on his camel, his enemies would run away. One day, the king's enemies sent their spies to kill the camel so they could invade the kingdom. The spies succeeded, stabbing the beast to death. However, just before it died, the camel laid down in front of the invaders to stop them from entering the kingdom. Since then, this spot has become known as Burabay Mountain (a bura is a male camel) and a lake on the valley is called Lake Burabay. Today, there are more than 80 lakes surrounded by rocky cliffs and pine forests in this region, and Lake Burabay is the largest. In recent years, many resorts have been opened here to take advantage of the area's outstanding natural beauty and clean mountain air

The Caspian Pipeline Consortium subscribed schools, colleges and universities of the Atyrau Region to the National Geographic Qazaqstan magazine. The annual subscription of all 219 educational institutions of the region is paid with CPC charity funds. Over 7.6 thousand copies of the magazine are distributed via the Kazpost offices. The project mission is to make the famous scientific and educational magazine accessible for schoolchildren and students in the region where the Consortium operates.



“We Have Not Lost a Single Person on the Road...”

FOR THE LAST YEARS, THE SITUATION WITH EMERGENCY MEDICAL RESPONSE HAS SIGNIFICANTLY IMPROVED IN THE REPUBLIC OF KALMYKIA. THE CASPIAN PIPELINE CONSORTIUM HAS NOTABLY CONTRIBUTED TO THIS PROCESS BY PURCHASING DOZENS OF AMBULANCE CARS FOR THE REGION.

Over the past three years alone, CPC has handed over more than 30 ambulances to Kalmykia health professionals. The Republican Center for Disaster Medicine received nine new cars.

The cars are equipped with modern equipment: artificial lung ventilation devices, defibrillators, ECG machines, pulse oximeters, express blood glucose meters, which makes it possible to reliably perform medical evacuation of patients in life threatening conditions.

In 2016, the legislative amendments came into effect in Russia stipulating that an emergency crew should arrive within 20 minutes or less in emergency cases. The gift from CPC allows medical personnel to comply with these regulations, given that the need for this is constantly increasing.

“The number of calls to patients requiring specialized medical care has increased from 762 in 2014 to 1,459 in 2016 and is over 90%. The number of patient medical evacuation cases

increased by 173%,” said Vladimir Sangadzhiev, Head of the Republican Center for Medical Disasters.

Eduard Bogdanov, the Deputy Director for Technical Support of the Republican Center for Medical Disasters, told to Panorama CPC correspondents that the Center staff amounts to 80 people, 16 of which are drivers. Both paramedics and drivers praise the cars donated by the Consortium for their equipment, reliability, noiselessness, warmth and comfort.



Igor Karbushev

The vehicle fleet renovation gave the Republican Center an opportunity to quickly and safely transport patients from district hospitals to specialized institutions in the capital of Kalmykia and beyond to the federal health centers of the country.

The vehicle fleet renovation gave the Republican Center an opportunity to quickly and safely transport patients to specialized centers

On these cars, the Republican Center crews mainly deliver medical care in severe road accidents. For example, in early 2018 in the Ryazan Region the bus with residents of

the Republic of Kalmykia turned over because of an accident. The doctors of the region were first to render first aid to the injured, and then the most serious injured were transported to the best hospitals in Moscow after their condition had stabilized. The very cars of the Republican Center for Medical Disasters were used for transportation.

The ambulances have very diverse routes: Astrakhan, Rostov, Derbent, Samara... The longest run for now was to Saint-Petersburg: the Republican Center crews transported injured children to a specialized medical center there.

"Road is a road; we have had various surprises. It happened that after one road accident we had to rescue three victims at the same time. My colleagues and I are proud that as

Nikolay Dodgaev, the Head of the Public Drug Provision and State Purchases Department of the Ministry of Health of the Republic of Kazakhstan, summed up our visit to the Republican Center, "You have seen only a small part of the charity support provided by CPC to the republic in the medical field. This is



Nikolay Dodgaev

a very timely succour not only for the residents of Kalmykia, but for the neighboring regions as well. Our medical staff is constantly upgrading their qualification. Thus, more and more comfortable conditions are being created for the population." ■

by Pavel Kretov



The cars are equipped with modern equipment



The ambulances have very diverse routes: Astrakhan, Rostov, Derbent, Samara...

'Golden Hour' Rule

IN EARLY AUGUST 2018, GENERAL DIRECTOR OF THE CASPIAN PIPELINE CONSORTIUM NIKOLAY GORBAN AND THE GOVERNOR OF THE ASTRAKHAN REGION ALEKSANDER ZHILKIN TOOK PART IN THE CEREMONIAL HAND-OVER OF THE ANGIOGRAPHIC COMPLEX TO THE ALEKSANDER-MARIINSKY HOSPITAL. THIS EQUIPMENT BROUGHT THE DIAGNOSTIC AND THERAPEUTIC RESOURCES OF THE REGIONAL HOSPITAL MORE IN LINE WITH THE BEST WORLD STANDARDS.



Svetlana Olkhovskaya, Chief Physician of the Hospital, is welcoming the guests

my heart so easily?" says Svetlana Olkhovskaya, Chief Physician of the Healthcare Institution.

In fact, it is not that easy, and in many ways it was made possible thanks to the modern angiographic X-ray diagnostic complex manufactured by Japanese company Shimazu and purchased by CPC at a cost of RUB 45 million. With the number of screens (some of them are located directly on the unit and part of them is outside the operating theatre), various levers, buttons, switches, the angiographic complex control panel

resembles the aircraft cockpit stuffed with instruments.

Unlike the equipment of previous generation, the new angiograph allows physicians to view vessels in the 3D format, without which, for example, it is impossible to treat cerebrovascular diseases and effectively combat aneurysms. Now, a physician can examine in detail the necessary section of a vessel or other organ, and correctly choose appropriate treatment methods. It is important, for example, in case of strokes. Prior to screening a special contrast medium is

WITHOUT A SCALPEL OR ANAESTHESIA

Today, physicians of the Aleksander-Mariinsky Regional Hospital perform the most complicated human cardiovascular system surgery without a scalpel or anesthesia. With the help of a thin tube and special medical devices, they examine and treat the vessels of legs, neck, head and, of course, heart.

"A person has a closed circulatory system. With a mini-puncture, we can reach the vessels on a leg through the arteries on the arm and vice versa. Patients are meanwhile conscious, do not feel pain, sometimes it seems to them as if they have been simply patted on the hand. And then they are surprised, "How could you reach



The new angiograph allows the physicians to view vessels in the 3D format

injected into the vessel; as a result the vessel ceases to pass X-rays and is well visualized on the screens. Using a computer screen as a map, surgeons reach the damaged vessel or organ and begin treatment.

“We were very happy to receive equipment that will take the quality of medical services rendered by our hospital to a new higher level,” Svetlana Olkhovskaya notes with gratitude to the Consortium.

ROUTINELY AND EMERGENTLY

The Aleksander–Mariinsky Regional Clinical Hospital is one of the largest multi-disciplinary healthcare institutions in the region with 1,100 beds. It includes 58 divisions, among which there is a vascular surgery department, the only department of this profile in the region, which provides specialized medical care to patients with this type of pathology.

Together with the angiograph donated by CPC, there are now two such apparatuses in the hospital. It allowed the medical institution to distribute the flows of routine and emergency patients. After all, such surgical interventions can last up



After commissioning the new device, the physicians were able to expand routine work with patients

to four hours. The new equipment has high capacity: up to 15 patients per day can be checked up. The two angiographs together will allow carrying out up to 5 thousand surgical interventions a year.

“With the commissioning of a new device, we were able to expand our routine performance. With the old apparatus, we will be able to introduce new techniques for balloon angioplasty of arteries in order to

treat patients with diabetes and gynecological diseases, and oncological patients,” says Aleksander Yanpolsky, Head of X-ray Diagnostic and Treatment Methods Office.

X-ray surgeons, who will stand at the operating table, completed training not only in clinics in Moscow and Saint Petersburg, but also abroad. Aleksander Yanpolsky completed residency training in A.V. Vishnevsky Institute of Surgery »





*Nikolay Gorban and Aleksander Zhilkin:
a press point*

in Moscow; then he specialized in endovascular surgery in the Federal Center for Cardiovascular Surgery in Astrakhan, and later he interned in healthcare institutions in Germany, France and Cyprus.

SAVED LIVES

According to the results of the All-Russian Physician Competition of 2018, Elena Lipnitskaya, Candidate of Science, Head of the Cardiology Department was the first in the Best Cardiologist category. The department she is in charge of specializes in providing high-tech medical care to patients with acute vascular diseases in life-threatening state.

“When delivering care to patients with acute coronary syndrome, there is such term as a ‘golden hour’: it is a period of time that should pass from the patient’s admission to the department to ballooning the coronary artery when urgent coronary angiography followed by stenting should be done. In our hospital, patients are delivered to the X-ray surgery in 15 minutes,” emphasizes Elena Lipnitskaya.

To ensure such promptness, special cardiovascular crews are formed in the hospital, including cardiologists, resuscitators and X-ray vascular surgeons. While the patient is still in the ambulance, they are already in touch with the ambulance paramedic and are preparing all necessary equipment in the operating room. The efforts of physicians are not in vain. Think over the following figures: only within the past year,

FOR ALMS-DEED...

At the ceremony of the angiographic complex hand-over, there was a high-spirit atmosphere. The medical professionals demonstrated the angiograph to the distinguished guests: CPC representatives, Head of the Region Aleksander Zhilkin and management of the regional Ministry of Health, as well as to numerous journalists. The medical staff told them in detail about the angiograph functioning principles. A lot of warm words were expressed towards the donating Company.

Svetlana Olkhovskaya, Chief Physician of the Healthcare Institution, presented CPC General Director Nikolay Gorban with the symbol of merit of the Aleksander–Mariinsky Regional Hospital for Alms-deed for introducing new technologies that improve public health.

The new equipment allowed taking the quality of services rendered by the hospital to a new higher level

thanks to the systematic work of the physicians of the Aleksander–Mariinsky Regional Clinical Hospital, the rates of morbidity and mortality from cardiovascular pathology among the regional residents have decreased by 14 % and keep on decreasing dynamically.

After receiving the award, Nikolay Gorban noted that he accepted this symbol of merit not as a personal gratitude, but as gratitude to the entire multinational team and shareholders of the Consortium. ■

by Pavel Kretov



Svetlana Olkhovskaya is presenting Nikolay Gorban with the symbol of merit for Alms-Deed



Participants in the angiograph hand-over ceremony: a commemorative picture

Children Get the Best!

ON THE EVE OF THE NEW SCHOOL YEAR MIKHAIL GRISHANKOV, CPC DEPUTY GENERAL DIRECTOR, AND ALEKSANDR ZHILKIN, GOVERNOR OF THE ASTRAKHAN REGION, PRESENTED 10 MERCEDES BUSES TO PRESCHOOL INSTITUTIONS, GENERAL EDUCATION INSTITUTIONS AND SPORTS SCHOOLS OF THE REGION.



The photo was provided by the public affairs office of the Governor of the Astrakhan Region

The Consortium allocated over 25 million rubles to purchasing vehicles. Each bus is designed for 22 passengers and equipped with the GLONASS system. The seats are equipped with safety belts and personal communication with the driver, the passenger compartment has an autonomous heating system and anti-slippery flooring. To ensure safety during the transportation of children the buses have speed-limiting devices installed and set to 60 km per hour;

it will also prevent driving with a door open.

Five districts of the region received new vehicles: the Krasnoyarskiy, Kharabalinskiy, Enotayevskiy, Nari-manovskiy, and Limanskiy districts.

The Consortium provides active support to communities of the Astrakhan Region; approximately 928 million rubles were allocated as charitable contributions to various regional projects in 1998–2017. ■

As Good as in the City!..

ON AUGUST 29, 2018, IN STAROMYSHATOVSKAYA COSSACK VILLAGE OF THE KRASNODAR KRAI MIKHAIL GRISHANKOV, CPC DEPUTY GENERAL DIRECTOR, AND ANNA MINKOVA, DEPUTY HEAD OF THE KRASNODAR KRAI ADMINISTRATION, PRESENTED THREE KUBAN RURAL SCHOOLS WITH THE SETS OF EQUIPMENT FOR LINGUAPHONE ROOMS. THE CONSORTIUM ALLOCATED 2.1 MILLION RUBLES TO THIS CHARITABLE PROJECT.



The sets of equipment for linguaphone classes were given to the following schools: school No. 37 of Staromyshatovskaya Cossack village of the Dinskiy district, school No. 18 of Temizhbekskaya Cossack village of the Kavkazskiy district, and school No. 59 of Shkolny village of the Krymskiy district. Previously CPC financed the construction and equipment of the dining facility with the capacity of 150 persons for school No. 18 (in 2012), capital repair of school No. 37 and construction of a new building for school No. 59 (in 2017).

Each of the sets of equipment for linguaphone rooms is designed for simultaneous training of 12 pupils

and includes the following: a teacher's computer with the specialized software, headsets, workstations in the form of semi-booths with desks, and digital remote controls for the pupils.

Thanks to the linguaphone equipment purchased by the Consortium, the level of foreign language teaching in the Kuban rural schools will be as good as in the cities.

When the linguaphone room was delivered to school No. 37, Anna Minkova thanked the Consortium for partnership and patronage of educational institutions and stated as follows:

“We need to do everything for our children to be able to stand competition and find a decently paid job in the future. Knowledge of a foreign language is one of the main parameters which is considered by employers.”

Mikhail Grishankov, in his turn, emphasized that support of community projects in the region was one of the priority activities for CPC.

“Almost 1 billion rubles were invested in the social services of the Krasnodar Krai during the last three years. A major objective for our company is to invest in human life.” He said: “We will have a lot of joint projects in future.” ■

With the Earnest Care

JSC CASPIAN PIPELINE CONSORTIUM-R HAS BEEN IMPLEMENTING THE "CPC TO THE FIRST GRADE PUPILS" PROGRAM FOR NINE YEARS: ON THE EVE OF A SCHOOL YEAR THE COMPANY PROVIDES CHILDREN WHO ARE GOING TO BECOME FIRST-GRADERS WITH ALL THE REQUIRED ACCESSORIES AND STATIONERY.



A bright school backpack, inside which a kid is anxious to see...Inside it, there is a rainbow of markers, pencils and watercolors, brushes, pens, rules, color paper, drawing blocks, covers for copybooks and training books, and many other things that will help to do the first happy and easy step from a care-less childhood into the World of knowledge.

FAMILY ATMOSPHERE

All the participants of the ceremony of presenting the school backpacks have only positive emotions. All of them – first-graders-to-be, their parents, teachers and the donators are full of joy. The presents are given in a warm, family-like and ingeniously festive atmosphere.

The representatives of the Consortium seem to prepare their own children to school. The program administrators in the regions select the backpacks for the first-graders with great care. For instance, a supplier in the Republic of Kalmykia was provided with the following detailed

order: "A backpack for a first-grader, dimensions: 26 × 17 × 33 cm, weight: 700 g. The backpack should have the regulated shoulder padded straps with insertions, with a five-ribbed yarn, which are sewn in the strengthened bottom. Additional external partitions should be available. There should be two partitions for the books, drawing books, files inside the backpack to have all the items in order. The front part should be zip-locked. The back should be made of propylene with

the insertions and tufting. The backpack should be made of nylon with water-resistant coating and backing. The print should be bright – it should be silkscreen printed." The same attention is given to the quality and safety of school accessories and stationery in the backpacks of the first-graders.

Each package costs 2,500 rubles. Under the "CPC to the First Grade Pupils" program in the Republic of Kalmykia 2,229 children received



the stuffed backpacks, in the Astrakhan Region – 2,495 children, whereas in the Stavropol Krai and the Krasnodar Krai – 1,340 and 4,400 first-graders, respectively, received such a necessary and timely present from CPC-R. The total cost of the Program in the regions of CPC-R operation was 27.3 million rubles.

CONTINUED, GOOD-HEARTED, RELIABLE

During visits to schools and communication with the local residents, the employees of the Press affairs office repeatedly hear the words of appreciation to the Company for taking part in the preparation of children to school. It is a great support to low-income and large families as well as to families with the disabled kids. In addition, of course, it is a major support to the orphanages, shelters and remedial schools, which have very limited budgets.

The “CPC to the First Grade Pupils” program in the regions is considered as a continued, good-hearted and reliable initiative integrated into the daily life of the cities, villages and settlements along the pipeline of the Consortium.

THANK YOU!...

Viktor Volgin, CPC's chief specialist for relations with regional authorities (Krasnodar Krai), shared with the editorial board several messages



from thankful parents that he received on his corporate e-mail. Here are some of them:



Hello! My name is Ekaterina, my son is a first-grader this year, and our family became a participant of your charitable program. I am a single mother with three children. I cannot but thank CPC for the support received. This support from the Consortium is invaluable for many families! You are doing a great job! THANK YOU!

Katya Tikhonova



Thank you very much for the present to Kirill Linskiy, my son and a first grader of Comprehensive School No. 39 of Trudobelikovskiy Cossack village. I am so happy that there are such people as you. With sincere appreciation, Kirill's mother and father. The kid is absolutely happy! Thank you very much!

Evgeniya Linskaya



Speaking on behalf of myself and parents of the first-graders of municipal Comprehensive School No. 1 named after I. D. Buval'tsev in the Korenovskiy district municipality, I would like to kindly thank your company for the pupil's package, which we received within the “CPC to the First Grade Pupils” 2018 Charitable Program. Having four children, I understand how difficult and costly it is to prepare a kid to a new school year. This task becomes easier thanks to your help. We are so grateful to you for your care about children! ■

*Best regards,
Olga Chagrova*



WONDERFUL SCHOOL DAYS!

On the eve of September 1, the management of JSC CPC-R gave junior pupils useful presents. 213 first-graders of the Novoaleksandrovskiy city district of the Stavropol Krai received backpacks with all the necessary school accessories and stationery. The festive event took place in Comprehensive School No. 5. Erkim Taashev, a specialist of JSC CPC-R for relations with local authorities, who was present at the ceremony, said the following warm words to the happy recipients:

“Dear friends! I would like to congratulate you with the coming festive Knowledge Day on behalf of Mr. Nikolay Gorban, CPC General Director. You are growing up and become more self-reliant, you start a new stage of your life. School years are wonderful. You will have new friends, and your teachers will be your tutors and guides into the world of knowledge. Let this way be interesting, studying successful, and when you grow up you have a great success.”

After the official speeches, the former preschoolers were really anxious and happy to receive the presents. The parents thanked the management of the Consortium for their attention to the growing generation, whereas the first-graders promised to listen to their teachers and get only excellent grades.

The partnership of the Stavropol Krai and CPC lasts for over 10 years. During this period, the Company invested almost 600 million rubles into social programs of the region. In 2018, the Consortium allocated about 27 million rubles to the “CPC to the First Grade Pupils” charity program.

Based on the materials of the official web-site of the Novoaleksandrovskiy city district of the Stavropol Krai

Uniting the Team!

DURING THOSE MOMENTOUS DAYS WHEN THE EMOTIONS OF FOOTBALL FANS RAN HIGH FOR THE WORLD CUP IN RUSSIA, CPC'S TEAM WAS PLAYING IN THE INDOOR FOOTBALL PREMIER LEAGUE OF THE NATIONAL FUEL AND ENERGY COMPLEX.



The result was over the expectations: CPC team won the third place in the Golden Cup tournament of the Amateur Football League of the National Fuel and Energy Complex, leaving far behind more experienced teams that participated in this tournament many times.

What is the background of such a successful start? Let's try to understand by backwinding the story.

VICTORY STARTS WITH A TEAM

Igor Storozhenko, chief PR manager and captain of the CPC's Moscow office football team, says:

"At the beginning of April this year our HR unit asked us to consider

the possibility of CPC's indoor football team playing in the Amateur Football League of the National Fuel and Energy Complex tournament. It's participants year by year are the industry specific R&D institutions, various organizations of Gazprom and other companies. It was the starting experience for us. We were to create a team within the shortest period and play decently at our level. An objective success factor was that CPC traditionally supports the development of physical training and sports. For several years the employees of the Moscow office play in the rented gym on the Tulskaia subway station, and this helps them keep fit.

We had a meeting with employees who have football skills and

suggested that they participate in the tournament. As a result, we had our team that started training."

According to Igor Storozhenko, the time was very limited but, in the long run, it worked out. On behalf of all the teammates, he thanked Aleksandr Berezhanov, HR manager, and Yuriy Kirichenko, lead HR specialist, who initiated the participation of the CPC team in such a high-level sports event. Besides, our interlocuter thanked the personnel of the Legal Department who supported the team in all the required procedures and timely prepared the agreement with the tournament organizers, and thus the CPC football team was promptly made a participant of the competition.

FOOTBALL BATTLE

The games were played for more than two months, usually in the evening at the playing field of the Spartak Football Club Academy in the Sokolniki district. The CPC team played its first game at the end of April, and the last game in the Cup, in which our colleagues played for the 3rd place, was early in July.

"The tournament consisted of two parts, the first part was the group round robin stage after which the best teams took part in the tournament cup," explains Igor Storozhenko. "The teams ranking the first to the forth places – us included – played in the so-called



CPC team players at the award ceremony. Commemorative photo with Yuriy Kovtun, Russian football alumnus



Golden Cup of the Champions League.

Our competitors included experienced well-knit teams consisting of young strong players. Our team included people of different age, but – as we all have the necessary skills – together we were a machine. We became a well-knit team. Despite tough working schedule, my colleagues regularly visited the games. Our application included 20 persons but there was a rotation due to business trips and 10 to 12 persons usually visited the games. Following the 5-A-Side indoor football rules, 5 field players and a goalkeeper can be at a time in the field with the unlimited number of replacements. An intensive game with two times of 25 minutes is quite a lot, that is why

the games were conducted with frequent replacements, and each of the players could have his big time!

“It is rewarding to know, that the best attack player of the National Fuel and Energy Complex League plays for the CPC team,” says Igor Storozhenko proudly. “It is Alibek Kasym, who notched 10 goals, assisted several times, claimed one of the most efficient players of the round and twice cited as the player of the round select team. I was also a player of the select team once.”

After the round robin, the tournament turned to its playoff stage in line with the cup system. The games were played not only by the National Fuel and Energy »



**ALEKSANDR
BEREZHANOV,**
HR manager:

“The National Fuel and Energy Complex League tournaments have been conducted for several

years already, but CPC was invited to the event for the first time. We assessed our chances and understood that in theory we can try, and still the result was over the expectations: the CPC team won the 3rd place.

The achievement was supported by the team spirit of your players who represent various departments and units of the Moscow office. Even some of our contractors participated as this is not prohibited by the tournament's regulations.

The main conclusion that we can make out our bow: it is necessary to stretch this experience to the units inside the CPC, including the Kazakhstan and Russian parts of our team.

Until now, the interregional sports competitions in CPC were not conducted, though some regional units have experience of internal sports events. For instance, sport competitions are conducted during the celebration of the Oil Worker Day in the Central Region.

We submitted a suggestion to the Management Group regarding the organization of a tournament between the teams representing regional business units arranged for the CPC HSE Day. The regional managers are to assess the possibility of the regions to form football teams.

We understand that there are problems related to work on a rotational basis and vast geographical diversity of our facilities. At the same time the idea of interregional competition was supported by the regions and, which is really important, approved by the management of the Company. The draft budget 2019 includes money for the implementation of this idea.”





**IGOR
STOROZHENKO,
captain of the
football team:**

"I would like to thank all the guys for having the time, for gathering together,

for having a pleasure from the game and their input into our joint success. I would also like to thank the Company, which traditionally pays great attention to the development of the physical training and sports among the employees by reimbursing their fitness costs and renting sports facilities. Let the CPC's sports traditions further develop!"

Complex teams but also by the representatives of other leagues – Premier IT, Moscow Agency for Construction, the military-industrial complex – and the CPC team played with them. Our players dismissed Geokom team from the Moscow Agency for Construction league, but in the semi-final lost to KB Motor team from the military-industrial complex league, whereas in the game for the third place prevailed over White Hills team.

We ask the captain: "This great result can possibly attract new players into the team. Do you plan to enroll additionally?"

"Well, if some players from the French national team is eager to support us, we would definitely invite them. We would also go for some members of the Russian national team...", jokes Igor Storozhenko. "But seriously speaking, we welcome all those who want to play! It is my understanding that there is a plan to further develop this activity, and now it is discussed to have a CPC tournament between the teams from the Eastern Region, Central Region, Western Region and the Moscow Region. It is suggested that the football games for

the annual HSE Day be arranged, which is visited by the representatives from all the regions."

HIGHLIGHTS

Alibek Kasym, projects and planning advisor, who was called the best attack player of the tournament, shared his impressions:

"The brightest moment was when we played for the third place. After a long time the score was 1:1 which resulted in a penalty shootout. Moreover, it is always a gamble; you never know who the winner is and who is an outsider. We had a situation similar to that of the Russia –

"I do not really know how many goals I have notched. I did not have a plan to make a goal record. Football is a team game!"

Alibek Kasym got fond of football when he was a child and played in a community football team. Then this hobby became a real involvement. He was trained in youth athletic center No. 6 in his native city, Alma-Ata. He was noted in the tournament commemorating Georgiy Kozelko, the honored coach of the Republic of Kazakhstan; he was invited to Kayrat, the Alma-Ata professional football club, where he successfully played two years, but finally he decided to have football as a hobby only.

*I did not have a plan to make a goal record.
Football is a team game!*

Spain game. We were worried. I was the one to hit first, and everything went great."

"Who of your teammates was playing best?"

"Virtually everybody! Each of us was making his best, worked out, and we all played at our maximum.

"Being the best attack player, what can you say about your own conduct?"



Alibek Kasym

It is worth mentioning that our colleague is fluent Chinese speaker, he specialized as a pipeline engineer in the China University of Petroleum and worked in China for 7 years after graduation.

"When I worked in CNPC, we had a football team," tells Alibek Kasym. "We successfully played not only in the tournaments of the business units of CNPC, but also in the championships between the cities of Shanghai, Beijing, Guangzhou; in 2009 we became champions of the tournament arranged for the celebration of the Chinese New Year."

According to our interlocutor, it is quite symbolic that the CPC team had a successful start in the National Fuel and Energy Complex League during the World Cup. He is sure that the corporate football attempts should further develop.

"Football is communication, it is developing informal relationship among employees, which is really unites and knits the team," says Alibek Kasym. ■

Written by Ekaterina Suvorova
Photo: <http://psp/championat.com/liga/6>

Below Clouds...

THE EMPLOYEES OF THE CPC MOSCOW OFFICE KNOW: SHOULD THEY USE A HELICOPTER TO VISIT THE REGIONS, VYACHESLAV BUKHARIN, CHIEF SPECIALIST FOR AVIATION SERVICES PROVISION, CAN ANSWER VIRTUALLY ALL QUESTIONS REGARDING THE BUSINESS TRIP PLANNING. AND IT IS HARDLY A SURPRISE: DURING FIFTEEN YEARS OF PRACTICE IN THE BORDER SECURITY FORCE AVIATION VYACHESLAV LEARNT THIS TYPE OF ROTARY-WING EQUIPMENT INSIDE OUT.



Vyacheslav Bukharin

BEING A MEMBER OF THE CREW

After graduating from the Kirov Military Aeronautical Technical School in 1987, Vyacheslav Bukharin, aged 20, started his aviation service as lieutenant of the Border Security Force in the city of Khabarovsk, the Far Eastern Border Guards. After the expert aviation medical commission examination he was appointed senior flight mechanic of the armed helicopter MI-24.

"A good vehicle," recalls Vyacheslav. "Very speedy (its speed is 1.5 time higher compared to MI-8) and flexible MI-24 incorporated

state-of-the-art technologies of that time: retractable landing gear, auxiliary power unit (APU), crew life support system (similar to the present-day climate control system). At the same time, MI-24 was technically difficult to operate, hard in part of the landing conditions, unstable when hovering. Not all flight crews wanted to fly on it. Therefore, when four years later I was offered to move to MI-8T, I thought it was easy and convenient for flights in the Far East conditions."

INVALUABLE EXPERIENCE

Service in the Border Security Force Aviation implies business trips and permanent rotation of the crews. Therefore, just two months after the start of his service in a helicopter crew, Vyacheslav was sent to perform special tasks on securing the state border with Afghanistan. Hot climate, high humidity, and sand storms became a serious challenge for crews and aviation equipment. In this situation MI-8T was no

longer perceived as that reliable as it was in the Far East. Due to the insufficient capacity of its power unit it could hardly answer its purpose. To ensure safe flights in local climate, in the mountains it was necessary to limit the take-off weight by decreasing the fuel amount and useful load onboard. »



IATA diploma in the sphere of flight safety arrangement in the aviation companies



FLIGHT SAFETY IS THE MOST IMPORTANT THING

In 2006, Vyacheslav Bukharin was employed by the Caspian Pipeline Consortium.

“In CPC I was pleased to see a serious attitude towards flight safety, which is demonstrated not only by high requirements to the crew qualification and to the helicopter arrangement but also by the requirements to procedures establishing the culture of flight safety at each aviation enterprise. Due to the safety policy, CPC established the standards based on the experience of using helicopters in various operating conditions all over the world. This experience is summarized in the recommendations of the IOGP (International Association of Oil and Gas Producers) and is reflected in the CPC documents,” noted Vyacheslav Bukharin.

The helicopter technology is developing. At the same time, the requirements to aviation machines and the equipment used, as well as to the qualification of pilots are also increasing. In this situation Russian helicopters MI-8, which were previously used by CPC, were to be abandoned. They were replaced with new helicopters, equipped with modern devices capable of operating in adverse climatic conditions. At present, CPC uses

Thus, it was clear that it was high time for new machines to come, with a better power unit like helicopter MI-8MT. This helicopter has one and a half times more powerful engine, it is equipped with an additional power unit like MI-24, later models of the machine had improved navigation equipment, modern avionics, reinforced transmission and rotors installed. After retraining for MI-8MT in 1993, captain Bukharin was appointed senior mechanic of the helicopter formation and received the qualifications of the board technician and instructor.

In 1995, Vyacheslav Bukharin was sent to training to the Military Aeronautical Engineering Academy named after professor Mr. N. Zhukovskiy, upon graduating from which in 2000 major Bukharin returned to military service in the Far East as deputy commander of the unit and chief of the engineering and aviation service of a specialized squadron in Blagoveshchensk.

Vyacheslav used an invaluable experience of helicopter operation and aviation services organization in his further civil life.



Eurocopters are used for the Consortium needs starting from 2014



CPC employees and contractors' representatives start a flight to "Tengiz" oil pumping station. Kazakhstan, 2015



Employees of the CPC Western Region before a flight on a Eurocopter

Eurocopter EC-135 manufactured by Airbus Helicopters.

CPC is constantly monitoring the market of new helicopters and unmanned aviation systems both of

The current trends in the Russian aviation industry provide a hope that new domestic aviation equipment complying with the international efficiency and safety requirements will be certified in the coming years.

CPC adheres to standards based on the global experience of using helicopters in severe conditions

Western and Russian production to timely respond to technical innovations which are most compliant with the Consortium needs.

To meet the existing strict requirements in such situation, Vyacheslav Bukharin has to study a lot and improve his qualification.

He has learnt English, graduated from the evening department of Plekhanov Russian University of Economics, and in 2008 received an IATA diploma in the sphere of flight safety arrangement in the aviation companies. In 2013, Vyacheslav successfully completed the training course on «Management of the Technical Operation of a Helicopter» arranged by the Helicopter Association International (HAI) to study burning issues related to foreign helicopters operation.

Constant improvement is a trait of a real professional. ■

by Pavel Aleksandrov



I Like Intellectual Games, and This Will Last Forever!

LIFE IS BUT A GAME! YOU'D BETTER PLAY IT THAN WATCH IT!



Mikhail Trukhin,
“Dreams Do Come True!”

STARTING WITH THE CHILD'S DREAM

For many years, What? Where? When? TV show has attracted egg-head spectators to their TV screens. Already being a primary school pupil, I did not miss a single game. With no less excitement, I looked forward to other similar TV shows: Svoya Igra (Your Own Game) and Brain Ring. I had my favorite players and teams I supported. Since my childhood, I imagined myself sitting at a round table in the Hunting Lodge in Neskuchny Garden next to the luminaries of intellectual games: A. Druz, M. Potashev, B. Burda, and others.

My excitement about these TV shows died away a bit when I went to the senior school. People around me had completely different interests, so I came to realize that I was no match for Druz and Potashev.

The dream to once go on television wearing a White Tie or gown faded away slowly but steadily.

Both at school and at the university, the opportunity to try myself in the intellectual games failed to spot me. I used to watch only sports broadcasts then. Nevertheless, sometimes I flashed back to my child's dream and began to search for opportunities to make it into intellectual games. However, since I did not have a right person nearby, I was almost sure that it was some kind of a closed society.

A chance played its part. After the university I found myself in a large community related to competitions and team games. It was a kind of symbiosis of sport, intellectual games and extreme. One day, one of my teammates send a message to a general chat that they needed a person to play

What? Where? When? game. My dream, which had almost extinguished as the years passed, came up with a bang in a happy hour. So, in 2014, I became a player of What? Where? When? game.

3.14 TEAM

The first game I took part in was with 3.14 Team within the 60 Seconds competition. Technically, it is not What? Where? When? game. This is a commercial project for people who want to relax a bit after work (and here where the paradox comes) by racking their brains. In fact, 60 Seconds can be called What? Where? When? as this club is formed by people who play this game, and they also prepare questions for game players.

For me personally, 3.14 Team became not only the first one, but truly kindred. The captain of



the team with his wife by now have become my good friends. I also have warm relationship with other members of the team. I played 3 seasons, i.e. 9 months with 3.14 Team.

When I mentioned my new hobby, I learned that people around me also played... the classic What? Where? When? game. And soon it was my first time to try myself in the classic sports What? Where? When? game. Having found my way to the "very in-crowd", I realized that I wanted something more.

WITH A TASTE OF EXTREME

As I've already mentioned, I had another great passion from my youth – sports-extreme games. This passion has led me to a sufficiently large community of people who are fans of the same hobby. Our



with one and only idea and moved towards common goals and achieved them. We spent together most of the free time. However, one

I proposed to create the Mads team in 60 Seconds based on our team as I was sure that this additional activity would knit the team together, help it to come into the spotlight to attract new people.

Highly erudite quick-thinkers are appreciated by the team

Mads team was a single body, not to exaggerate a family (although sometimes we could hear the word 'sect' about us).

For several years, more than a hundred people have been preoccupied

day everything comes to an end. In 2014, our team suffered a crisis: a lot of the team members including the team's core ceased to play at the same time, stopped doing what united us and was the core of the team.

I was a member of the so-called administrative team at that time, which determined the vector of the team development. It was a hard time as it was necessary to encourage the remaining people, to recruit and train newcomers in order to prevent the structure from decay. We have outlined ways to revive a strong team.

RENEWAL OF MADS

Our project was not only sports and extreme, but intellectual as well. Highly erudite people were appreciated within the team who loved various kinds of riddles, puzzles and were quick thinkers. At one of the meetings of our group,

The old team let me go with very touching and motivating wishes. Then, in the first season of 2015, the new Mads team, whose captain I became, entered the minor league of the 60 Seconds project.

The reality beat the Dutch. There were much more than 6 people required for 60 Seconds rounds who wished to play with the team. We were immediately promoted to the first league (second by seniority), and since the number of people allowed it, we organized the second team called Mads_lite. It was also favourable since the teams played at different time, and if anyone could not play on one day, they had the opportunity to come on another day.

At the same time, I began to push Mads team in another project, where you needed to think: Mediaassorty. This is a very specific format where questions are based on multi-media fragments: photos, videos, and audios. Thanks to the game dynamics, variety of formats and tasks, the Mads members took a great liking to this tournament. Two team squads were always »





Intellectual battles are the best relaxation!

had found an answer that turned out to be incorrect. The most important decision at that time was to assign an individual with a role of a “bra”: this is how a participant who stuck to the meaning of a question was called in What? Where? When? game terminology. Of course, the involvement of new people, including those with whom I played the classic What? Where? When? game helped. Thanks to these measures, we began to win more and more individual games, and based on the results of the winter season 2016–2017 we entered the top league of the tour-

and I received my little crystal owl following the season.

DROP THE FACADE

It's been the year since Mads team has been playing in the Super League. It's turned out that it is possible to play with professional players. Having lost one very valuable player of our team when we entered the Super League (he had already played in it in another team), we got two other strong players who became the core of our team. During the year, we have not yet been

I realized that without people who looked forward to the victory we would never progress

present during the game, and even three team squads participated in one game. These were the golden days of Mads team.

However, over time, the decay began. Firstly, most of the players were newcomers who were interested at first, but gradually this interest faded away, and they ceased to play. Secondly, the crisis ended up in the parent team, and several persons who supported the team during 60 Seconds games decided that this was no longer necessary. Thirdly, and most importantly, was that we won individual games, but could not win the first league season in order to move to the top league. Therefore, Mads_lite team disappeared first. And during one of the seasons, I hardly collected at least three persons in order to play and not leave the first league based on the results of the season.

Finally, I realized that without people who were keen on intellectual games, who looked forward to the victory we would never progress. It was necessary to alter the team work. For example, we made a lot of infancy mistakes: we gave wrong answers since no one followed the form of the question; we often stopped discussing a question if we

named. Thanks to these victories, I could again choose players because there were more and more people who wanted to play and win.

Having spent one season in the top league and realized that we could win, we came to the 60 Seconds super league in the second season, where there were professional players involved including those from the classic What? Where? When? game. We won the League Cup,

the first in the Super League games coming second or third and remaining in the middle of the overall standings. Therefore, now the key task is to begin to be steadily placed high and beat the most awarded team of the Mask club, whose player successfully played in the Svoya Igra TV show.

In addition to the games of Mads team, sometimes I play the classic What? Where? When? Game as part





Selfi with Anatoly Wasserman, the luminary of intellectual games

of the Silovoi element Bampera (Bumper Power Component) team at one of the top-rank venues in Moscow where the teams of A. Wasserman, M. Potashev and other participants of What? Where? When? and Svoya Igra telecasts play. Unfortunately, we do not have such a huge experience lived through, and it is worth acknowledging that our eminent rivals have a really phenomenal erudition. However, now I can say with confidence that they are just ordinary people like us, though they know a little bit more.

I, myself, have perfectly well realized that I like intellectual games, and this will last forever. The main thing in this game is not the way you grasp the question, but the way you work in a team, communicate with people kindred and striving for a common victory. I sincerely believe that my team is the best and deserves only the first places!

A BIT OF THEORY

I have mentioned above the classic/sports What? Where? When? and 60 Seconds games. Therefore I would like to clarify what this all means.

What? Where? When? TV show is just the tip of the iceberg of

an enormous community numbering hundreds of thousands of people from different countries who play the same game. In general, the principle of the game is similar to the TV-format game, except

that teams compete with each other and not with TV viewers. The teams are similar: not more than 6 people. The so-called simultaneous tournaments are held on a regular basis: sets of questions, answers to which you can obtain in 2 to 3 logical moves. These sets include up to 36 questions different in complexity. Sometimes knowledge of the school curriculum is sufficient to answer these questions, and sometimes very specific knowledge in specialized areas is necessary.

The tournaments are held during several days (usually a week) in different places around the globe. Based on a quite complicated formula that is used in the tournament rating, the tournament

result and some other components, the team gets a certain number of points, which is included in the International Club Association rating. This is the strength indicator of the team. The same rating is generated for the players in What? Where? When? game. The first 500 players of the rating are considered professional players of the What? Where? When? game.

60 Seconds game is a commercial project established, among others, by professional players of What? Where? When? game but more suitable for people with little experience in playing What? Where? When? games. All questions that the 60 Seconds players receive are edited by the professionals of What? Where? When? game. The questions in the Super League are often on a par with the questions in the classic What? Where? When? game.

At the moment there are five 60 Seconds major leagues in Moscow. In the framework of this

*Our eminent rivals are
just ordinary people like us,
though they know a little bit more*

project, other intellectual events are held: Mediaassorti mentioned above as well as Kinoliga and Sportliga for the fans of films and sports.

There are also corporate 60 Seconds leagues, in which representatives of different companies compete.

At this point I will finish a dive into the world of intellectual games. If you have read the article to the end and it was of interest to you, I will be happy if there are colleagues willing to try themselves in that area. Who knows, if one day CPC will have its representatives in the corporate 60 Seconds league. ■

*by Mikhail Trukhin,
MAXIMO Leading Administrator*

Battlefield Arteries

WE HAVE PREVIOUSLY TALKED ABOUT PIPELINES LAID FOR THE NEEDS OF THE ALLIED ARMIES DURING WORLD WAR II: THE INDIA–BIRMA–CHINA PIPELINE SYSTEM, FUEL PIPELINE LAID UNDER THE ENGLISH CHANNEL, GASOLINE PIPE ACROSS LADOGA LAKE AND OTHERS. TODAY, WE WOULD LIKE TO THINK BACK ABOUT THE FIRST SOVIET MILITARY TRUNK OIL PIPELINE THAT WAS CRUCIAL FOR SUPPLY OF FUEL TO THE RED ARMY TROOPS THAT WERE MARCHING TOWARDS BUDAPEST.



CHALLENGING TASK

In late summer of 1944, the Red Army, having defeated large Hitler's forces in the west of the country, advanced the attack outside the Soviet Union. The position of Nazi Germany headed downhill. Now it had to stand on the defensive on three fronts at a time: in Italy, in France, and in Central and South Europe against the USSR. Along with the loss of vast territories, Germany was also deprived of access to hydrocarbon resources. In August, the oil-bearing area of Ploesti in Romania was left behind the front line. When these resources were lost, Hitler still had deposits in Hungary, and was prepared to fiercely defend them.

Already in September 1944, the troops of the 2nd and 3rd

Ukrainian Fronts crossed the Hungarian border. During October they retook a third of the country's territory and created conditions for an attack on Budapest. However, achieving this goal proved to be challenging. "This operation required a long-time meaning-

of transport could stick on washed out roads. In these conditions, it was quite hard to supply the front with everything required," recalled General Shtemenko.

To supply fuel to the 2nd and 3rd Ukrainian Fronts, Black Sea Navy

The oil-bearing area of Ploesti in Romania was left behind the front line. When these resources were lost, Hitler still had Hungarian deposits, and was prepared to fiercely defend them

ful preparation, especially since the autumn foul weather had come, and it was raining cats and dogs. Air fleet scarcely operated. We often had to drag cannons by hand. All means

Fleet and Danube Fleet, the USSR State Defense Committee decided to deploy a demountable 225 km long pipeline from Ploesti to the oil depot in the port city of Reni, with further transshipment to rail and river transport.

MARCH TO ROMANIA

In the second half of 1944, sets of American demountable pipelines with pump stations, as well as Chevrolet vehicles with a carrying capacity of 1.5 tonnes were delivered to Naro-Fominsk near Moscow. The formation of fuel transfer battalions was also started there. Fuel supply service officers were appointed for the positions of squadron commanders, and graduates of the Combustibles and Lubricants Faculty of the Armored Forces Academy were appointed for the positions of mechanical engineers.



Fuel transshipment from rail to road transport

The battalions marched to Romania by rail in late October. After the route had been selected and examined, they started to lay down the pipeline and install the pump stations.

While laying the main line, soldiers used sets of pipelines of the so-called lightweight and standard pipes. Lightweight pipes were manufactured of thin sheet steel; they were fairly light, which made it possible to load, offload and install the pipeline without any lifting gear. In areas where the use of light-

engine mounted on a common frame. Engine power reached 90 horse powers at 500 rpm.

At the same time, fuel transfer battalions had to participate in the restoration of oil fields and refineries in Ploesti. As a result of hard work, the task of pumping through the pipeline was accomplished in late December 1944.

BATTLE FOR BUDAPEST

The pipeline capacity was 40 m³ per hour. It supplied a total of

Fuel transfer battalions had to participate in the restoration of oil fields and refineries in Ploiesti

weight pipes was not recommended, standard pipes were used.

In places where the fuel line climbed up the hill, the military installed check valves to automatically isolate the pipeline in case of rupture; downhill, they installed automatic pressure control valves to balance pressure.

The pump stations were located with an average interval of 10 km. They included a two-stage centrifugal pump driven by a carburetor

about 610 thousand tonnes of fuel. Thanks to this pipeline, the Soviet troops of the 2nd and 3rd Ukrainian Fronts advancing in Hungary did not suffer from shortage of fuel. On December 26, they besieged the enemy Budapest troops.

Battles for the Hungarian capital were really tough. The Nazis created a robust fortified zone with three defense lines, and concentrated large mobile forces, including picked SS troops. The enemy not only made resistance, but



Field pipeline installation

repeatedly initiated the offensive, during which the Red Army had to recall the experience of defense in the battle near Moscow, as well as battles near Stalingrad and Kursk.

Nevertheless, on February 13, the Hungarian capital was liberated. During 108 days the troops of the 2nd and 3rd Ukrainian Fronts defeated about 60 divisions and brigades of the enemy. The successful completion of the Budapest operation reversed the strategic landscape. There was a threat to the utilities of the Balkan German forces that had to speed up the withdrawal of their troops from Yugoslavia. The troops of the 2nd and 3rd Ukrainian Fronts were given the opportunity to carry forward advance to Vienna, Berlin and Prague. ■

by Pavel Kretov



Battles in Budapest



Soviet tanks in the liberated capital of Hungary

Caspian Pipeline Consortium: a time-tested international project



CPC-R, MOSCOW OFFICE

Business Complex "Legion-1",
4th floor, B. Ordynka Str., 40, building 4,
Moscow, 119017, Russian Federation
tel: +7 (495) 966-50-00
fax: +7 (495) 966-52-22
e-mail: Moscow.reception@cpcpipe.ru

CPC-K, ASTANA

10th floor, Kunayev Str., 2,
Astana,
010000, Kazakhstan
tel: (7172) 79-17-00
fax: (7122) 76-15-91
e-mail: Astana.reception@cpcpipe.ru

CPC-K, EASTERN REGION

Business center "Seven Stars",
Satpaeva Str., 34A,
Atyrau,
060011, Kazakhstan
tel: (7122) 76-15-00, 76-15-00
fax: (7122) 76-15-91
e-mail: Atyrau.reception@cpcpipe.ru

CPC-R, CENTRAL REGION

Kirova / Krasnogo znameni Str., 24A/10,
Astrakhan,
414000, Russian Federation
tel: +7 (8512) 31-14-00, 31-14-99
fax: +7 (8512) 31-14-91
e-mail: Astrakhan.reception@cpcpipe.ru

CPC-R, REPUBLIC OF KALMYKIYA

Suite 608, V.I. Lenina Str., 255A,
Elista, 358000, Russian Federation
tel: +7(84722) 4-13-89
e-mail: Elista.reception@cpcpipe.ru

CPC-R, WESTERN REGION

Budennogo Str., 117/2,
Krasnodar, 350000, Russian Federation
tel: +7 (861) 216-60-00
fax: +7 (861) 216-60-90
e-mail: Krasnodar.Reception@cpcpipe.ru

CPC-R, STAVROPOL TERRITORY

Suite 208, Ryleeva Str., 7,
Stavropol, 355000, Russian Federation

CPC-R MARINE TERMINAL

Marine Terminal Primorsky District Territory,
Novorossiysk, Krasnodar Krai,
353900, Russian Federation
tel: +7 (8617) 29-40-00
fax: +7 (8617) 29-40-09
e-mail: MarineTerminal.reception@cpcpipe.ru

CPC-R, NOVOROSSIYSK

Vidova Str., 1A, Novorossiysk,
Krasnodar Krai,
353900, Russian Federation
tel: +7 (8617) 29-43-00
fax: +7 (8617) 29-40-09
e-mail: Novorossiysk.reception@cpcpipe.ru



*In June and July 2018
CPC has successfully
undergone the second
external audit and
confirmed compliance
of its Health, Safety
and Environment
Management System
(HSE Management
System) with the last
revision of international
standard ISO 14001:2015
and International
Safety Standard OHSAS
18001:2007. CPC showed
many efficient practices
and developed its safety
culture to the highest
standards*