



BULGARIAN AIR FORCE

CHALLENGES IN THE MAINTENANCE AND JOINT OPERATIONS OF HELICOPTERS OF SOVIET AND WESTERN TYPE

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AGENDA



- **ROTARY COMMUNITY, SUPPORT MODEL AND PROCUREMENT PROCESS**
- **DEVELOPMENT PROCESS PRINCIPLES FOR THE HELICOPTER PLATFORMS**
- **MANAGEMENT OF MODERNIZATION REQUIREMENTS WITH Mi-17/24 PLATFORMS**



BULGARIAN AIR FORCE ROLE



The BGR AF primary role is to develop and provide capabilities to the overall joint effort of the armed forces to protect the territorial integrity of the country, as well as to plan and execute independently the full spectrum of air operations to prevent any possible or existing threats, emanating from state, non-state, and individual actors, or any kind of natural disasters.



MISSIONS OF BULGARIAN AIR FORCE



DEFENSE

- Constitutional obligations
- NATO Article 5

SUPPORT TO THE INTERNATIONAL PEACE AND SECURITY

- CROs
- UN missions
- Arms control & non-proliferation
- Humanitarian missions

CONTRIBUTION TO THE NATIONAL SECURITY IN PEACETIME

- Early Warning
- Control of the Air
- Protection of the critical infrastructure
- Disaster Relief Ops



BULGARIAN AIRFORCE HELICOPTER FLEET

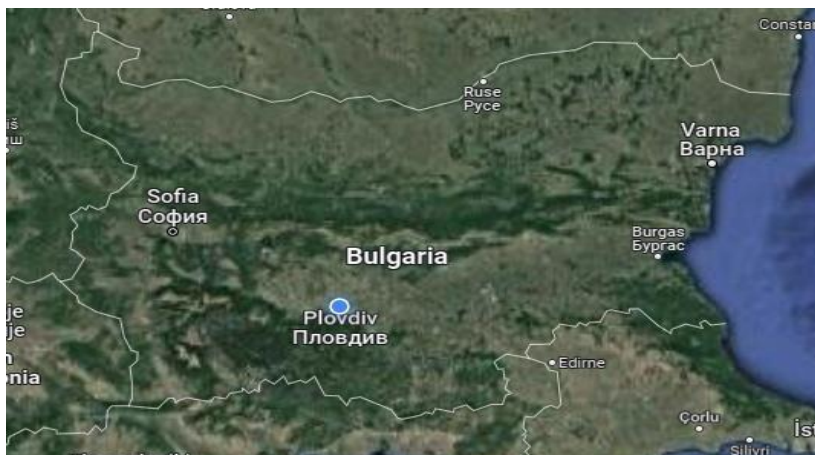


PLATFORMS:

- AS 532 AL COUGAR
- BELL - 206 B3
- Mi - 17
- Mi - 24

MOB:

- 24 Air Base - KRUMOVO





MISSIONS OF 24th AIRBASE



- Troops, ammunitions, and equipment transport including sling operations;
- CAS;
- Interception of low-speed air targets;
- Diversion-recce groups infiltration/exfiltration;
- SAR operations;
- Disaster relief operations to assist country's population (calamities, emergencies and catastrophes);
- Radiological, chemical and air reconnaissance;
- CSAR operations;
- Firefighting missions;
- MEDEVAC day and night;
- Cadets and junior pilots training.





TRAINING

- ❑ **PILOTS** - Theoretical, Regular flights, Flight Simulators, Tactical ...
- ❑ **MAINTENANCE STAFF** – Theoretical, Practical, Tactical

INFRASTRUCTURE

- ❑ **Continuous Infrastructure Improvements**
- ❑ **NEW A/C Maintenance Facility is in progress**
- ❑ **NEW Pathways are in progress**



HELICOPTER MAINTENANCE

O/I LEVEL MAINTENANCE including:

- **Regular checks and inspections**
- **Repair and replacement**
- **Activities for aircraft long life storage**
- **Bulletin performance and aircraft equipment upgrading.**
- **Long Term Storage**
- **GSE maintenance (Airbase, National laboratory, Foreign Contractors)**



AS 532 AL COUGAR and BELL-206B3 HELICOPTERS

- Routine Inspections (O Level)
- Basic Inspections (I Level) – BGR AF Facilities
- Major Inspections – Foreign Contractors
- Components MRO – Foreign Contractors
- Spares – Foreign Contractors



MI-17 / 24 HELICOPTERS

- Routine Inspections (O Level)
- Basic Inspections (I Level) – BGR AF Facilities
- OVH – National Facilities Specialized In Mi-17/24 A/F and Components OVH.
- Life Cycle Extension (Defense Institute & MoD Or MRO Facilities)



- **NATIONAL PUBLIC PROCUREMENT PROCESS – public procurement in accordance with Bulgarian national Legislation**
- **NSPA HSP – Bulgaria is a member of the NSPA Helicopter Support Partnership, under NSPA LA-Programme**
- **FMS/FMF – US Deliveries**

NATO CAPABILITY TARGETS PACKAGE FOR BULGARIA

- TACTICAL TRANSPORT HELICOPTER UNIT
- MEDEVAC UNIT
- SPECIAL OPERATIONS AIR TASK UNIT (SOATU)





DEVELOPMENT PROCESS PRINCIPLES FOR HELICOPTER PLATFORMS



- ❑ **BGR relay on AS532 AL Cougar Helicopters to meet NATO requirements.**
- ❑ **Mi-17 equipment is out of date and not proper to meet NATO Capability targets.**
- ❑ **Option for Mi-17 upgrade is available.**
- ❑ **BGR using Mi-17 for National tasks mainly (Firefighting, Transport and ect.)**
- ❑ **Mi-24 Fleet equipment out of date. Upgrade option is available.**
- ❑ **Based on current situation in Ukraine, sustainability of Mi-17/24 fleet not guaranteed and upgrade at this moment not considerate.**
- ❑ **BGR seeking for new platform to replace Mi-24 fleet to increase National and NATO Capabilities.**



DEVELOPMENT PROCESS PRINCIPLES FOR HELICOPTER PLATFORMS



BULGARIA PLANS TO INVEST AMOUNT OF MONEY IN TERM OF 10 YEARS TO INCREASE HELICOPTER FLEET CAPABILITIES, INFRASTRUCTURE AND GROUND SUPPORT EQUIPMENT.

- **AS532 AL COUGAR FLEET WILL BE SUPPORT ONLY THROUGH NSPA CONTRACTORS**
- **BELL FLEET WILL BE SUPPORT BY FOREIGN CONTRACTORS**
- **MI FLEET WILL BE MAINTAINED AS POSSIBLE AS USING ALL OPTIONS INCLUDING NATIONAL AND FOREIGN CONTRACTORS.**
- **MI-24 FLEET PLANNED TO BE REPLACED**
- **NEW FACILITIES WILL BE BUILD AND EQUIPED**
- **DELIVERY OF GSE**



AS532 AL FLEET STATUS

- AS532 AL fleet – 12 Helicopters. Around 15 years old (mid of life cycle).
- Supply chain - Available
- G inspections - In progress. Phasing performance of 15 Y Inspections
- Using NSPA contracts – Logistic support

AS532 AL FUTURES

- Airworthy restoration and sustainability of entire AS532 AL fleet – until 2028. Before end of Mi-17 life cycle.
- Upgrade helicopters to meet NATO capability requirements – Self-defense systems, IFF mode 5, Equipment to sustain jam resistant crypto communication Air to Air and Air to Ground.
- Procurement of weapon systems
- machine guns 50 cal. – 12,7 mm.





MI-17/24 FLEET STATUS

- Mi-17/24 Fleet – around 40 years old (end of life cycle).
- The supply chain for Mi-17/24 - Disrupted
- Russia cancelled the licenses of Bulgarian MRO Facilities
- NSPA no contractual options for Mi-17/24

MI-17/24 FLEET FUTURES

- Mi-17 – END OF SERVICE LIFE CYCLE UNTIL 2030
- Mi-24 – END OF SERVICE LIFE CYCLE UNTIL 2028
- Mi-24 – will be replaced by western type platform





Bell-206B3 FLEET STATUS

- Bell-206B3 Fleet – 6 Helicopters. Around 20 years old (mid of life cycle)
- Supply chain – Available
- Current contract available – until 2026

Bell-206B3 FLEET FUTURES

- Airworthy restoration and sustainability of entire Bell-206B3 fleet – until 2026
- Avionics upgrade – until 2026
- New training helicopters procurement – under consideration





FUTURES



- **CONTINUOUS INCREASE OF AIRWORTHY AS532 AL COUGAR and BELL-206B3 HELICOPTERS**
- **SUSTAINABLE AS532 AL COUGAR and BELL-206 FLEET**
- **AS532 AL UPGRADE TO MEET NATO REQUIREMENTS**
- **BELL-206B3 UPGRADE TO INCREASE NUMBER OF TRAINED PILOTS**
- **NEW WEAPONS PROCUREMENT FOR AS532 AL COUGAR FLEET**
- **ACQUISITION NEW TYPE (WESTERN) ATTACK HELICOPTER (before 2028)**
- **END OF MI-17/24 FLEET (until 2028/2030)**
- **IMPROVING OF INFRASTRUCTURAL**
- **FULL COMPATIBILITY WITH NATO REQUIREMENTS**



QUESTIONS?



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