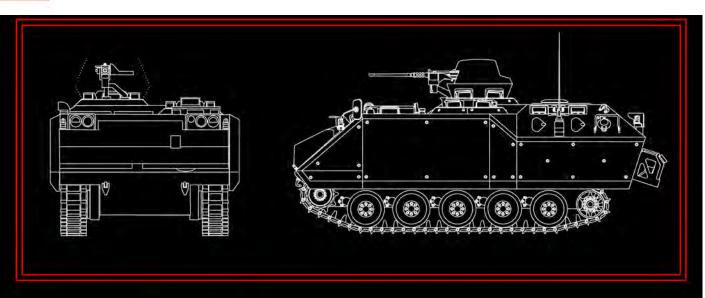


Armored Troup Transport







TECHNICAL SPECIFICATIONS

| | tures |
|--|-------|
| | |
| | |
| | |

- · High Reliability
- Air Transportable
- Full Operability in All Environmental Conditions
- · Outstanding Mobility in All Terrain
- Capacity for a Full Infantry Section Including Combat Supplies
- · Simple to Operate, Maintain and Repair
- · Growth Potential into 21st Century
- Excellent Price/Performance Ratio
- NATO Standard

Mission Specific Features

- · Multi-Mission Capable Vehicles
- Mobility Matching MBT's and Other Armored Battle Group Vehicles
- High Protection Levels Against Direct and Indirect Attack
- Reliability Improvements for Crew and Infantry Squad (NBC Protection, Automatic Fire Suppression System and Shock Absorbing Seats Against Mine Blast)
- · Defeat Dismounted Infantry

Rapid Deployment

- ACV-300 and Its Variants are Air Transportable by C130, C141, C17 and C5
- No Special Permits Required for Road and Rail Transportation

Supportability

- ACV-300 Has Commonality with Existing ACV FoV and M113 Fleet
- . High Reliability and Low Cost Ownership

Performance

Max. Road Speed

| - Forward | 65 | km/l |
|-----------|----|------|
| Payarea | 11 | Irm/ |

| Spee | ed in Water |
|--------|-------------|
| with ' | Track |
| Max. | Road Range |

 Max. Road Range
 490 km

 Gradient
 60 %

 Side Slope
 30 %

 Vertical Obstacle
 0.74 m

Technical

Engine Detroit Diesel 6V53T 305 hp (350 hp, Optional)

Hydrostatic Steer 4 Forward, 1 Reverse

155/152 mm Air Burst

6.0 km/h

(T-130 Forged)
Track Length on Ground... 2.68 m

General

Crew......(Incl. Gunner, Driver &

Overhead Protection.....

Automatic Fire

Suppression System...... Standard

Mine Blast Shock

Absorbing Seats..... Standard

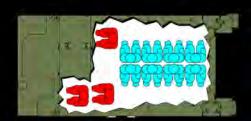




Weapon System

Stations Selected by the Customer)

Smoke Grenades...... 6 Smoke Grenades







MAIN FEATURES OF THE PARS VEHICLES

FNSS has developed a new generation of Wheeled Armored Combat Vehicles (WACV) with special emphasis on Mobility, Protection, Payload, and Growth Potential. FNSS has named the vehicles as PARS, which in Turkish means Leopard.

The vehicles employ the latest designs and technology from the commercial automotive industries which have been militarized to meet the performance and durability of modern military operational requirements ranging from multispectrum operations to operations in highly dense urban environments. The features of PARS were designed from the outset to allow the vehicle configuration to have a significant growth capability.

The vehicles are based on a system of systems of vehicles to include a 6x6x6 and 8x8x8 using significant commonality of each vehicle sub system, thereby reducing 'Logistic Foot Print' and Life Cycle Costs.

The vehicle incorporates 20 years of armored combat vehicle design development and production experience of FNSS.

MAIN FEATURES OF THE PARS VEHICLES

- Two thermal cameras and CCD cameras in the front and rear, providing driver/commander with high situational awareness
- Left or right hand drive steering (can be changed any time as required)
- Independent air suspension system
- All wheel steer
- All wheel drive
- Anti lock breaking system (ABS)
- Dual channel central tire inflation (CTI) and run flat tire inserts
- Integrated auxiliary power unit
- Self recovery winch
- Integrated survivability suite
- Modularity allowing use of common components among vehicle configurations

COCKPIT

- Integrated glass cockpit featuring two large flat panel displays that provide both vehicle status as well as situation awareness.
- Driver and commander sit side by side.
- Large periscopes are fitted to the "cockpit" at the front of the vehicle for the driver and commander for direct view.
- Open architecture for technology insertion.





FULL TIME ALL-WHEEL STEER

- Smaller turning radius in comparison to other vehicles
- Greater maneuverability
- Unique full ackermann steering with very minimal hull intrusion by wheels

0000

INDEPENDENT AIR SUSPENSION

- Allows less intrusive space into the hull
- Wheel travel of 470mm on PARS 6x6x6 & 520mm on PARS 8x8x8
- Dynamic ride height adjustment provide outstanding performance and stability under adverse terrain conditions and side slopes











WOBILITY

The vehicle mobility for "On Road, Off Road and No Road" was one of the main considerations in the development of the PARS Family of Vehicles. The main features differentiating the PARS from comparable armored combat vehicles are as follows.

- The mid-engine configuration distributing the power pack load over two axles, compared to front engine vehicles where the power pack load is on the front axle, reducing the ground pressure improving the soft soil mobility.
- Large tires with run-flat inserts combined with a CTIS system contributing to low ground pressure for better soft soil mobility and improved <u>Life Cycle Costs</u>.
- Independent suspension at all wheel stations with very large wheel travel for improved cross country mobility.
- Reduced un-sprung mass at the wheel ends, with differential mounted brakes inboard of the wheel ends, improving suspension performance and reducing <u>Life Cycle Costs</u>.
- All wheel steer for a significantly reduced turning radius and improving maneuverability in URBAN and close terrain.
- CAN Bus technology for speed and high resolution data transfer with in the vehicle.
- Large axle (9,000 kg per axle) capacity providing growth potential, increased durability and reduced <u>Life Cycle Costs</u>.

SUB SYSTEMS

- Air-conditioning.
- NBC protection.
- Automatic fire suppression system.
- Land navigation system.
- Various weapon stations.

PMIS BYEZE Technical

| Engine | 500 hp - 60 | 0 hp Diesel |
|-----------------------|---------------|--------------|
| Transmission | Fully Autom | atic |
| Number of Forward and | | |
| Reverse Speed | 7 Forward 1 | Reverse |
| Power to Weight Ratio | 20.4 to 24.5 | hp/ton |
| EURO Norm of | | |
| Power Pack | EURO 3 | |
| Power Pack Compliant | | |
| with NATO Single Fuel | | |
| Concept | Aviation F3 | 4 Fuel, JP8 |
| Number of Axles | 4 | |
| Driven Axles | All | |
| Steered Axles | 1,2,3,4 | |
| Transfer Case | | |
| (Shift on Fly) | 2 Speed | |
| Suspension | Semi-Auton | natic |
| | Pneumatic | Computer |
| | Controlled & | & Adjustable |
| Brakes | | |
| - Service | In Board Di | sc, Air/ |
| | Hydraulic w | ith ABS at |
| | Each Whee | 1 |
| - Parking | Integral to D | Driveline, |
| | Spring Activ | ated, |
| | Hydraulicall | y |
| | Released | |
| Electrical System | | |
| (Available Power) | 3 KW | 220V AC |
| | 420 Amp | 24V DC |
| | 30 Amp | 12V DC |

Performance Max. Road Speed.

Tire Type..

| Creep Speed. | 3 km/h |
|--------------------|---------------------|
| Swimming | 10 km/h (with pro |
| | 3 km/h (with tires) |
| Range | 700 km |
| Angle of Approach | 50° |
| Angle of Departure | 45° |
| Gradient | 60% |
| Side Slope | 54% |
| Vertical Obstacle | 0.70 m |
| Trench | 2.40 m |
| | |

Heavy Duty 1600 R20

Crew GVW.

Length...

Empty Weight

Height...... Ground Clearance

Payload..... Air Transportation

100 km/h

Genera

| Crew | 11 |
|--------------------|----------------|
| GVW | 27,000 kg |
| Empty Weight | 21,000 kg |
| Length | 7.97 m |
| Width | 2.82 m |
| Height | 2.35 m |
| Ground Clearance | 0.500 m |
| Payload | 6,000 kg |
| Air Transportation | A400, C17 & C5 |
| | |

| 20000 | | |
|-----------------------|--------------------|-------------|
| PARS DX6X6 | | |
| Technical | | |
| Engine | 400 hp - 50 | 0 hp Diese |
| Transmission | Fully Auton | natic |
| Number of Forward and | | |
| Reverse Speed | | |
| Power to Weight Ratio | 27.5 to 33 l | np/ton |
| EURO Norm of | | |
| Power Pack | EURO 3 | |
| Power Pack Compliant | | |
| with NATO Single Fuel | | |
| Concept | | 4 Fuel, JP8 |
| Number of Axles | | |
| Driven Axles | | |
| Steered Axles | 1,3 | |
| Transfer Case | | |
| (Shift on Fly) | 2 Speed | |
| Suspension | Semi-Autor | natic |
| | Pneumatic | |
| | Controlled | & Adjustabl |
| Brakes | | |
| - Service | In Board Di | SC, |
| | Hydraulic w | vith ABS at |
| | Each Whee | el |
| - Parking | Integral to I | Driveline, |
| | Spring Activ | |
| | Hydraulical | ly |
| | Released | |
| Electrical System | | |
| (Available Power) | 3 KW | 220V AC |
| | 420 Amp | 24V DC |
| | 30 Amp | 12V DC |
| Tire Type | Heavy Duty | 1400 R20 |
| Performance | | |
| Max. Road Speed | | |
| Creep Speed | | |
| Swimming | | |
| | 3 km/h (wit | h tires) |
| Range | | |
| Angle of Approach | | |
| Angle of Departure | 45° | |
| Gradient | 60% | |
| Side Slope | | |
| Vertical Obstacle | | |
| Trench | 1.75 m | |
| General | | |
| | | |

4,000 kg C130, A400, C17 & C5

19,500 kg

15,500 kg

2.44 m 0.400 m



M 113 Modernization and up-grading

