

- Leading company of Ministry of Industrial Policy of Ukraine in the area «Electronic systems of measurement, parameters monitoring and control of aviation engines»,
- Scientific organization, which is installed in Ukraine State Register and has the state support,
- Member of international Associations of aero-engines manufacturers.

# Licenses and certificates

- Design organization certificate that is issued by Interstate Aviation Committee, Moscow, Russia;
- Production approval certificate that is issued by State Administration of Ukraine for Aviation Safety Oversight;
- License on development, production, selling, repair and modernization of military equipment, which is issued by Ministry of Industrial Policy of Ukraine;
- Certificate of leading scientific organization in area “Electronic systems of measuring, monitoring and control of aviation engine” which is issued by Ministry of Industrial Policy of Ukraine;
- Certificate of State Registry of scientific organizations issued by Ministry of Education and Science of Ukraine.



# Main scientific and technical directions

- Measuring transducers and systems,
- Aviation control and monitoring systems,
- Program and technical complexes of aviation engine testing,
- Commercial and military weather stations,
- Control systems of wind and wind-diesel power stations.
- Embedded real-time applications,
- SCADA system for engine testing,
- Monitoring and simulation software,
- Gas-turbine engine models,
- Trend and correlation analysis tools.



# Pressure transducers

**P319** – 4...20 mA, in the State register of Ukraine,

**P419** – RS-485, in the State register of Ukraine,



- automatic network configuration,
- registration of operating time,
- registration of overtemperature, overpressure, overvoltage;
- remote calibration.

# Pressure measurement systems

**СИД-4Б** – 4 pressure channels,  
Antonov An-70,



Ан-70



СИД-4Б

**СИД-4А** – 4 pressure channels, stand of  
gas turbine engine testing



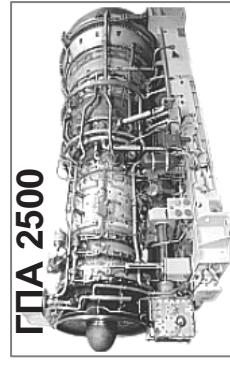
Ту-334

**СИД-3** – 2 pressure channels, surge  
detection, Tupolev Tu-334



СИД-3, 3-148

**СИД-3-148** – 2 pressure channels, surge  
detection Antonov An-148



ГПА 2500



П330

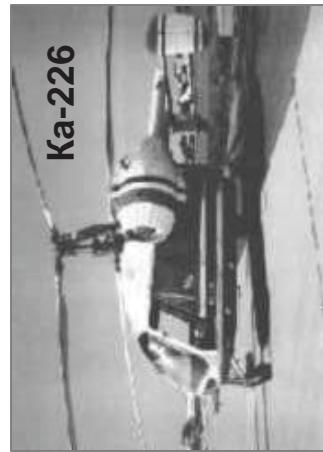
**П330** – monitoring of the pulsating  
combustion on base of g-independent  
(acceleration compensation up to 5000 g)  
high-temperature (500 degrees  
centigrade) sensor Kulite

# Control system (FADEC) РДЦ - 450

РДЦ -450, 450M



АИ 450, АИ-450М



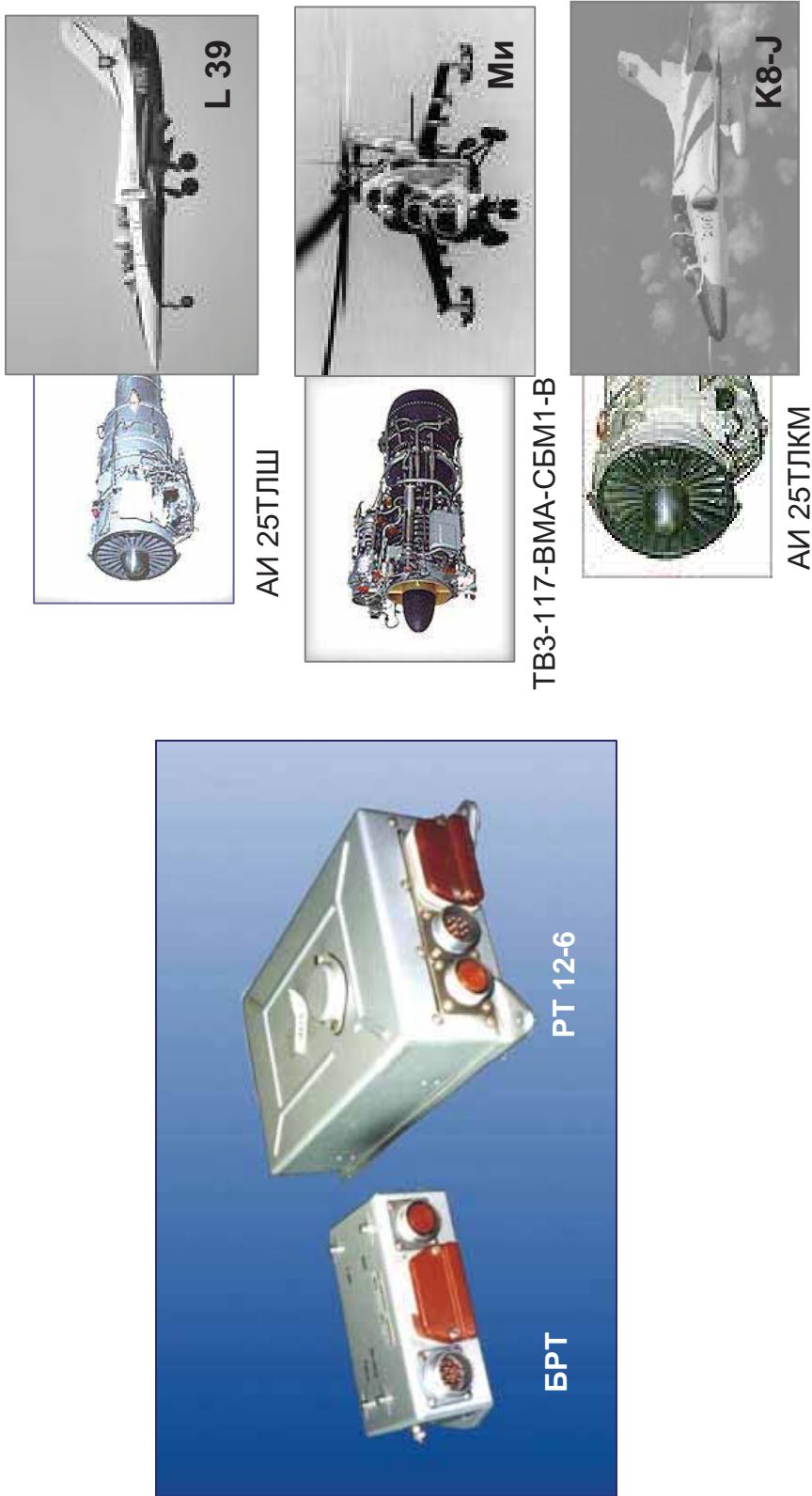
Ка-226

Ми-2М



- control - 2 channels ,
- overspeed – 2 channels,
- vibromonitoring – 1 channel,
- automatic fault compensation and reconfiguration,
- parameters - 12 channels,
- input discrete signals - 22 channels,
- input discrete signals - 23 channels,
- data communication with head unit.

# Regulator-limiter of engine exhausting gas temperature БРТ



# Program-technical complexes for engine testing

Klimov/Motor Sich VK-1500,  
Ivchenko-Progress/Motor Sich:

- AI-450 (Kamov Ka-226),
- AI-450 MS (Antonov An-148),
- AI-222 (Yakovlev Yak-130);
- D-436-148 (Antonov An-148);
- TV3-117-SBM (An-140).

АССОД / ВК 1500



ПТК-436-148 / Д 436-148



ПТК-ВДМР / АИ-450 МС



Channel type	Number of channels					ПТК-ВДМР / АИ-450 МС		
	АССОД -ВК	ПТК ДМР	ПТК- Д5Т	ПТК- ВДМР	АРШ			
Measurement	96	96	115	98	168	83	123	52
Indirect measurement	17	24	21	42	30	14	25	В стадии согласования
Discrete	216 48	192 24	176 48	192 18	16 -	224 32	240 34	38 -

# Main modifications

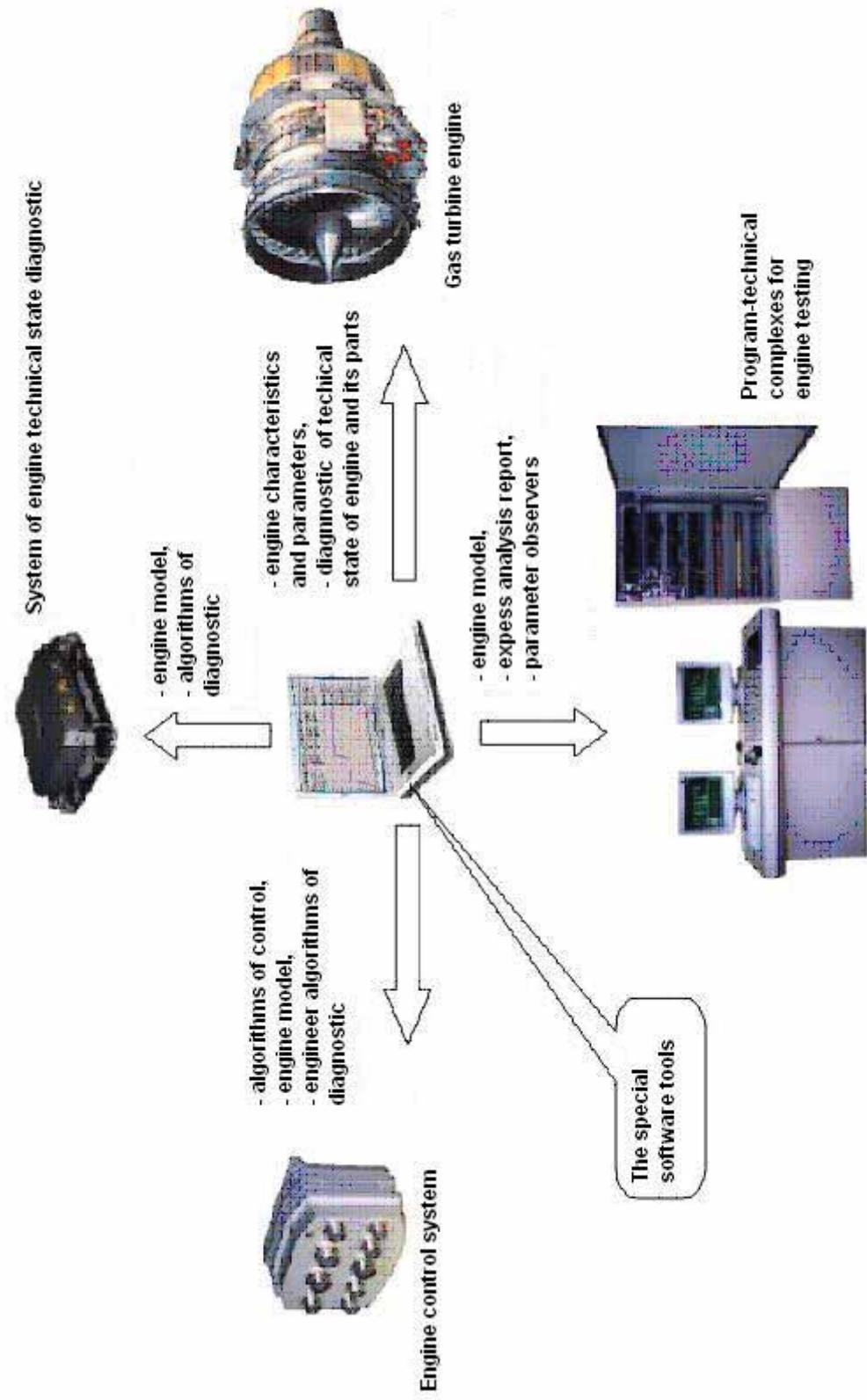
## Mobile complexes



## Stationary complexes



# HW & SW complex «Energy-XXI»



HW & SW complex of modeling, controlling and diagnostic of technical state of gas turbine engine based power sets

ИЗДЕЛЯ СПЕЦИАЛЬНОГО НАЗНАЧЕНИЯ



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ПРОМЫШЛЕННОЙ ПОЛИТИКИ  
УКРАИНЫ НА РАЗРАБОТКУ,  
ИЗГОТОВЛЕНИЕ, РЕАЛИЗАЦИЮ,  
РЕМОНТ И МОДЕРНИЗАЦИЮ  
ВОЕННОЙ ТЕХНИКИ

Серия АВ №227265 от 10.12.2007г.

ОАО "ЭЛЕМЕНТ" ВХОДИТ В ПЕРЕЧЕНЬ  
ПРЕДПРИЯТИЙ ОПК

Постановление Кабинета Министров Украины  
№244-р от 26.04.2007г.

Ан-70

СМД-4Б

