

Welcome **Guest**

January 02, 2020, 05:04:15 pm

Please [login](#) or [register](#) . Forever and ever entrance

News:

 Search[START](#) [HELP](#) [SEARCH](#) [THE CALENDAR](#) [ENTRANCE](#) [REGISTRATION](#)

[Russian Arms Forum](#) > [TECHNOLOGY](#) > [Armament and equipment of air defense forces](#) >
[Automated air defense systems and controls](#) >
"Universal-1E" - a complex of automation equipment for the air force and air defense

Pages: [1] [Go Down](#)[PRINT](#)

Author

Topic: "Universal-1E" - a set of automation tools for the Air Force and Air Defense Command (Read 5208 times)

0 Members and 1 Guest are viewing this topic.

WisaGeneral Moderator
Participant Offline

Posts: 228



I'm not a spy, I walk around

**"Universal-1E" - a complex of automation equipment for the air force and air defense**

On July 16, 2006 at 04:16 pm

Universal-1E

complex of automation equipment for command posts of the Air Force and Air Defense

PURPOSE, OPPORTUNITIES

Designed for automation of combat control of units and subunits of anti-aircraft missile troops (ZRV), fighter aircraft (IA), electronic warfare (EW) and radio engineering troops (RTV) while repelling air strikes and carrying out combat duty.

Complex of automation tools (KSA) "Universal-1E" provides the solution to the following tasks:

- bringing subordinate units and subunits on alert;
- monitoring the status and combat readiness of subordinate forces and assets, conducting continuous round-the-clock combat duty, identifying violators of air borders and aviation flight regimes;
- collection and processing of radar track information from subordinate and interacting controllers, management of RTV units and subunits, interaction with KSA to control airspace use;
- assessment of the air situation and decision-making on the distribution of efforts of active means to reflect it;
- control of hostilities of subordinate and attached units of air defense missiles, IA and electronic warfare for air targets, coordination of hostilities of forces and assets of the air defense region;
- guidance fighter-interceptors using the built-in and remote points of the guidance of the IA (PN IA);
- centralized information support of the combat operations of the Communist Party (PU), the safety of flights of its aviation;
- interaction with the KP of the neighboring air defense regions;
- current and final reporting on combat work and combat operations of subordinate forces and means of the air defense region;
- notification of KP types to channels and radio networks;
- Integrated and stand-alone combat crew training.

KSA "Universal-1E" was developed in two versions - portable and stationary.

TECHNICAL DESCRIPTION

CABINS INCLUDED IN THE COMPOSITION OF A KSA:

- combat control;
- combat control of the IA;
- communications, data transmission and registration;
- power supply and spare parts.

Transportation is carried out on its own using tractors, as well as rail, air and water (sea) transport.

The equipment of the complex of automation equipment "Universal-1E", located in a stationary structure (KP), includes:

- central computing complex;
- a set of display tools;
- a complex of data transmission tools;
- a set of tools for the final documentation;
- computer registration;
- Telecode information recording equipment.

KSA "Universal-1E" is an automated control system with an open architecture, and if necessary, hardware and software can be modified to solve the problems of the KSA KP and the headquarters of the operational level of air defense and air forces, or when changing the configuration, adapt to solving the functional tasks of automated PN IA.

KSA "Universal-1E" implements an automated method of combat command and control of air defense forces and forces through the intervention of combat crew KP in the operation of control algorithms. For this purpose, combat control personnel are provided with information and control resources through a user interface implemented on workstations (AWS) of the complex.

KSA automated workplaces for their intended purpose are divided into the following types:

- AWP, designed to solve the problems of information processing and combat control in real time (AWP combat control);
- AWP designed to solve the problems of planning combat operations (AWP planning);
- AWP operational dispatching staff.

At present, the KSA "Universal-1E" is the only complex in Russia that solves the problem of automation of the air defense CP and air forces of the air defense region in real time, performed on a modern hardware and software base.

MAIN CHARACTERISTICS

- Number of simultaneously processed air objects (VO) - 300
- Number of managed interacting parts:
 - by telephone - up to 20
 - by telegraphic channels - up to 16
- Number of simultaneously controlled air defense forces and means:
 - anti-aircraft missile units and parts of object and military air defense - up to 17
 - fighter aviation units - up to 6
 - parts (units) of electronic warfare - up to 3
 - fighters (fighter groups) - up to 10
 - fighter guidance points - up to 7
 - radio engineering connections and parts - up to 3
 - radio engineering units (in survivability mode) - up to 9
 - airborne radar monitoring and guidance systems - up to 3
 - the number of interacting KP air defense groups - up to 6

The limits of work by objectives:

- by range, km - up to 3200
- in height, km - up to 100
- by speed, km / h - up to 4400


Technical resource, hours - 150,000

Working hours - round-the-clock

SOURCES OF INFORMATION

- Vko.ru

Last Edit: July 20, 2012, 10:58:03 pm by Yary

 Recorded by

Aleksandr-K

Editor
Experienced
☆☆☆☆☆

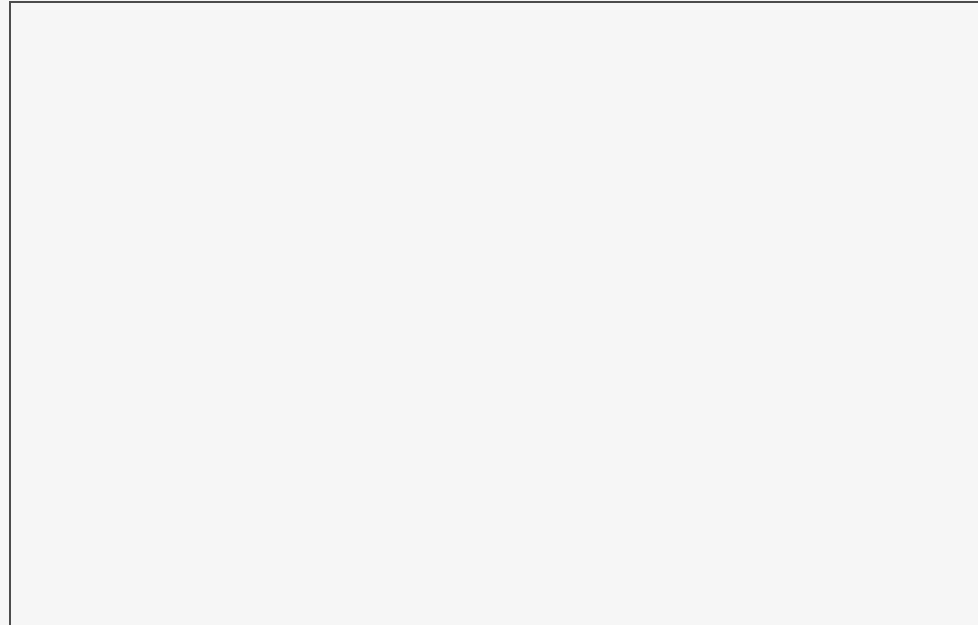
Offline
Posts: 385




Re: "UNIVERSAL-1E"

" Answer # 1: August 03, 2008, 10:59:03 am"

UNIVERSAL-1E



 UNIVERSAL.jpg (32.26 KB, 640x349 - viewed 1232 times.)

 Recorded by

Yary

General Moderator
Veteran
☆☆☆☆☆

Offline
Posts: 2337




Re: "Universal-1E" - a complex of automation equipment for the air force and air defense


" Answer # 2: September 04, 2012, 01:44:03 pm"

Universal-1E





 Universal-1E - 1 1 ausairpower.net.jpg (281.45 KB, 768x422 - viewed 492 times.)



 Universal-1E - 1 2 ausairpower.net.jpg (238.09 KB, 768x467 - viewed 429 times.)

Basic specifications	
Number of air targets processed simultaneously	300
Number of controlled and interoperating units:	
via telephone channels (by the ACCORD-SS-PD/ARAGVA algorithm)	16
via telephone channels (by the T-235-1L algorithm)	4
via telegraph channels	16
Max operating limits:	
range, km	3,200
altitude, km	100
speed, km/h	4,400
Into-action time, min	5
Number of automated workstations	15

 Universal-1E - 1 3 ausairpower.net.jpg (31.7 KB, 350x262 - viewed 417 times.)

 Recorded by

Do what you must, and whatever happens ...

Pages: [1] [Go Up](#)

[PRINT](#)

[Russian Arms Forum](#) >
 [TECHNOLOGY](#) >
 [Armament and equipment of air defense forces](#) >
 [Automated air defense systems and controls](#) >
 ["Universal-1E" - a complex of automation equipment for the air force and air defense](#)

SMF 2.0.15 | SMF © 2016 , Simple Machines
[XHTML](#) | [RSS feed](#) | [mobile version](#)