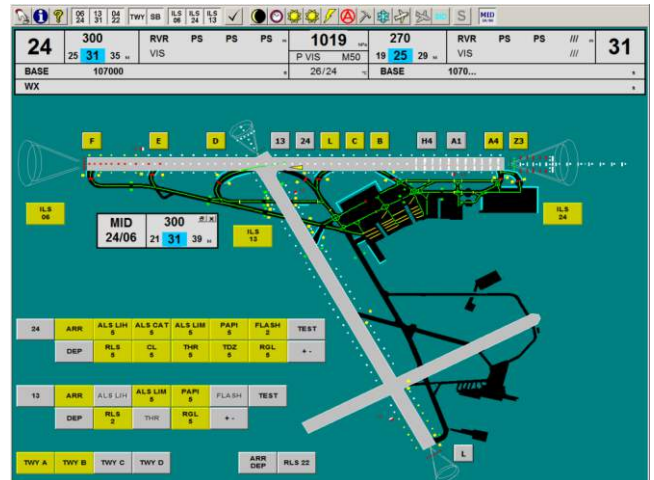


CONTROL AND MONITORING OF AIRFIELD GROUND LIGHTING EQUIPMENT

Description of function

- airfield ground lighting equipment are shown on the screen representing the airport layout
- control of airfield ground lighting equipment is made by trackball and push-buttons situated at the bottom on the screen (touchscreen)



CONTROL AND MONITORING CCR

Application

- backgrounds a status of each CCR

Description/Properties

CCR's name (light system) is in its head. The regulators background own status via values:

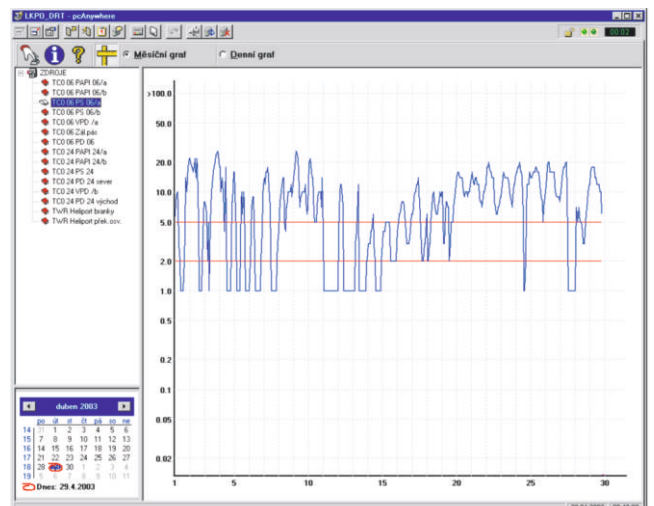
- ON/OFF
- Control mode remote/local
- Fault fault of regulation
- OVC over current
- OPC open circuit
- LF L1 lamp fault level 1
- LF L2 lamp fault level 2
- EF L1 earth fault level 1
- EF L2 earth fault level 2



Archive of ground fault detection TCR

Data selection by date or CCR or combination both. Select graph is windowing in main part of display:

- by days (graph of month)
- by hours (graph of day)



chapter:

2.3 SOFTWARE



METEOROLOGICAL EQUIPMENT

Application

- meteorological data for air traffic controller (for sending on board of the air-plane)
- automatic regulation of luminous intensity of airfield ground lighting equipment (data base the on measurement of runway visual range from the METAR/SPECI report)

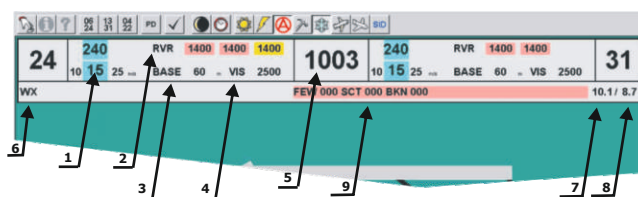
Connection

- serial lines RS-232 or TCP/IP
- working site Meteo is connected via the LAN network

Representation

- basic meteorological data are shown in the report "Airfield ground lighting" at the top part of the screen in meteorological ruler. This ruler contains a selection of the most important meteorological data.
- color shading gives to the air traffic controllers information about trend of the measured data, or about manually entered values
- remaining meteorological data (among others also QFE) are in the data windows Metreport, which can be opened from the top bar
- extended meteorological information is shown in the data window Meteo
- it is possible to switch representation of meteorological in requested runway directions
- tendency of the runway visual range is expressed by color shading of RVR, if the visual range is below 1500 m:

Yellow	steady state
Red	deteriorating state
Green	improving state



System provides the following information

- direction and strength of wind with max and min values
- RVR if it is measured on RWY at corresponding number of measuring points
- value BASE
- VIS general visibility
- QNH
- WX
- temperature
- dew point
- bottom base of clouds

Meteo information (RVR) is used for automatic control of luminous intensity of individual sets.

Failure states

- in case of unavailability of meteorological information the whole panel changes its color to violet
- if this unavailability last for more than 5 minutes, all the data will disappear

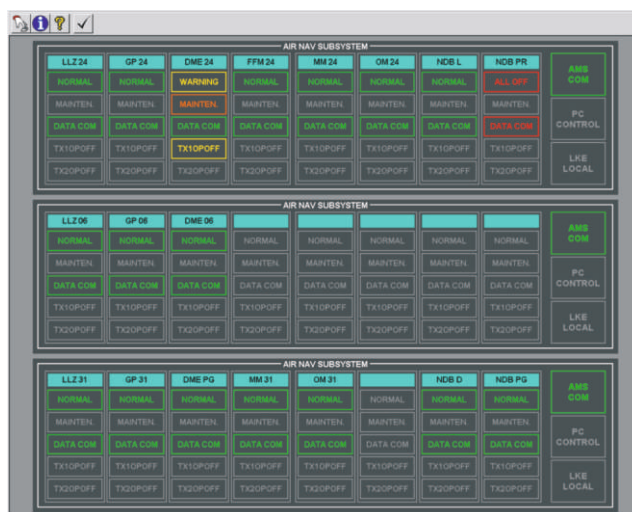
RADIO-NAVIGATION EQUIPMENT (LLZ, GP, MM, OM, FFM, DME)

Description/Properties

- system AMS sends a request and waits for data
- monitoring is performed continuously, regardless of state of the system

Control of ILS

- control is effected by the air traffic controller with use of mouse (trackball) and cursor on display
- control is always selected in such a manner that only one working site may control ILS equipment, and control of ILS from other working sites is blocked



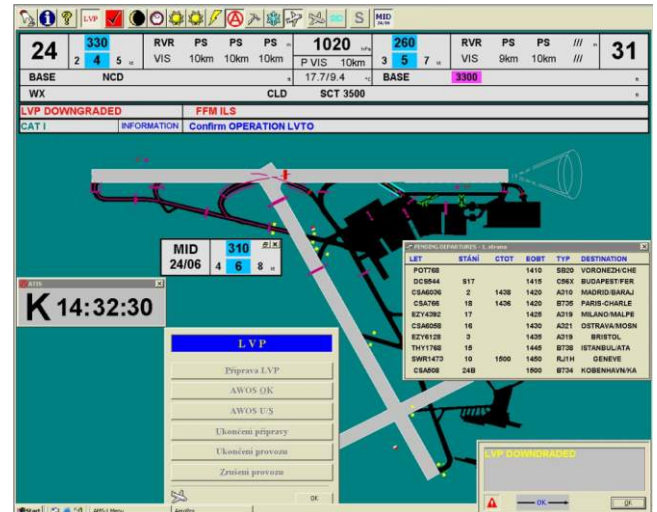
CONTROL AND MONITORING LVP/LVTO

Application

- preparation of low visibility procedures (Prep LVP)
- operation LVP
- preparation of low visibility take-off (LVTO)
- operation LVTO

Description/Properties

- system AMS performs control of parameters determined by the system for individual phases and it offers to bodies of air traffic control a possibility to acknowledge or cancel the proposed mode of operation
- after declaration of LVP or LVTO the system checks operating ability of individual devices of aviation safety technics (hereinafter AST) designed for the given mode of operation and meteorological conditions
- in case of AST change it degrades in depending on character of failure operation gradually from higher level to lower level, or directly to CAT I
- in case meteorological conditions are changed with improving/deteriorating tendency it proposes to bodies of air traffic control change to the mode of operation, which corresponds to the current meteorological situation at the airport



- monitoring and processing of basic information (weather, traffic restriction, emergency cases) designated for air traffic control
- ATIS information, including comparison of changes between the last 2 messages
- delivery of information (data) for central monitoring and control system

System AMS displays in the text window under the meteorological ruler the following:

- selected mode of operation corresponding to failure of AST
- information, which is to be sent to the crew on board of the airplane

Control and monitoring of the following airport systems

- control of airfield ground lighting (for runways and taxiways - AGL), including system BRITE II and stop bars
- monitoring system for Low Visibility Procedures (LVP) and Low Visibility Take Off (LVTO)
- radionavigation equipment and systems (ILS, DME, NDB)
- radionavigation equipment En Route (VOR, DME)
- electric power systems (EPS)
- meteorological equipment (ME) - AWOS
- protection zones
- central time
- AFTN
- data FPL Arrivals
- data FPL Departures
- RWY in USE - SID

chapter:

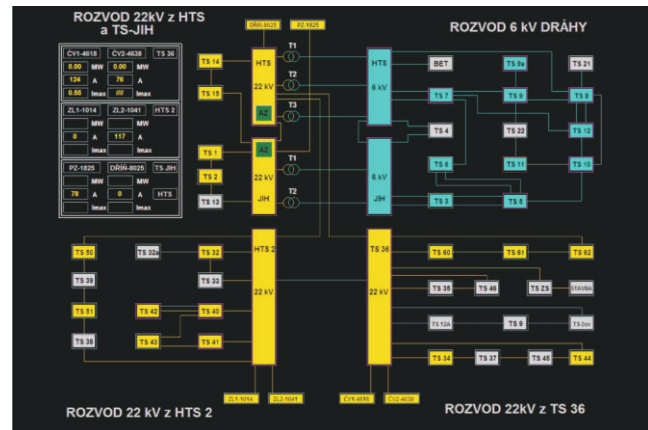
2.3 SOFTWARE



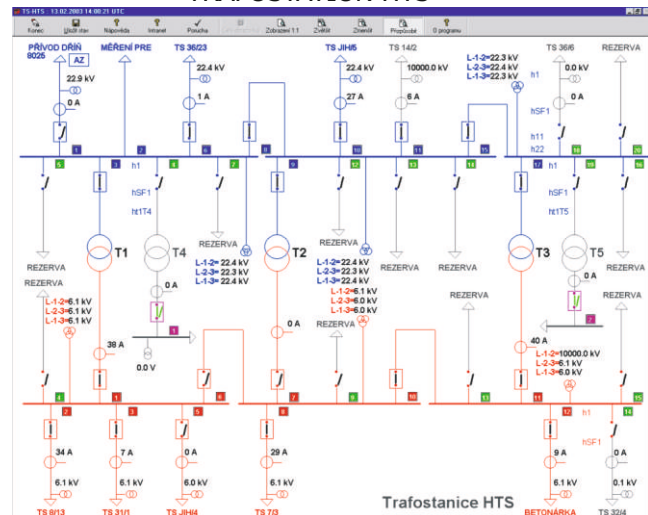
ELECTRIC POWER SYSTEMS

Application

- control and representation of state of the airport electric power system
- interactive diagrams of the whole airport power system
- interactive representation of individual transformer sub-stations with control of individual compartments and distributor fields in low and high voltage sections
- it sends data about power system to the airport monitoring system CAT II and CAT III
- archiving of all events occurred in the system
- optical and acoustical indication of change of condition



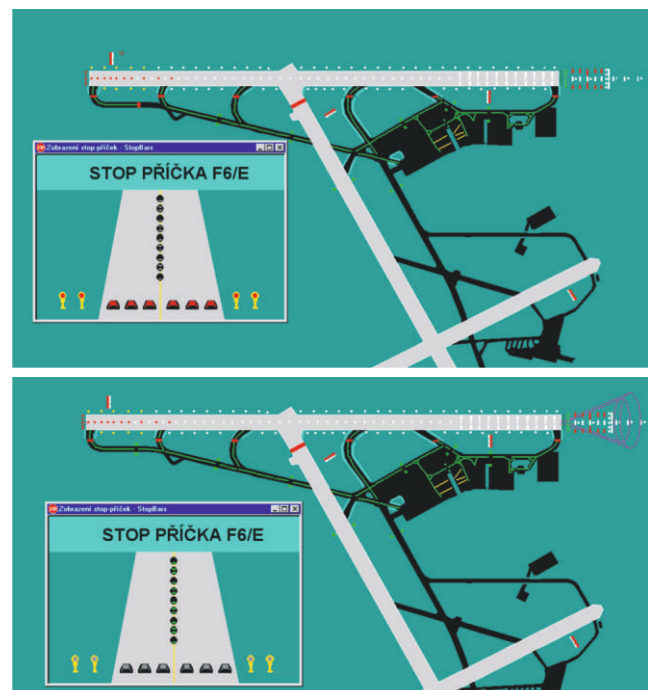
TRAFOSTATION HTS



CONTROL AND MONITORING STOP BARS

Description/Properties

- stop bar ON
- stop bar OFF, following by centreline TWY

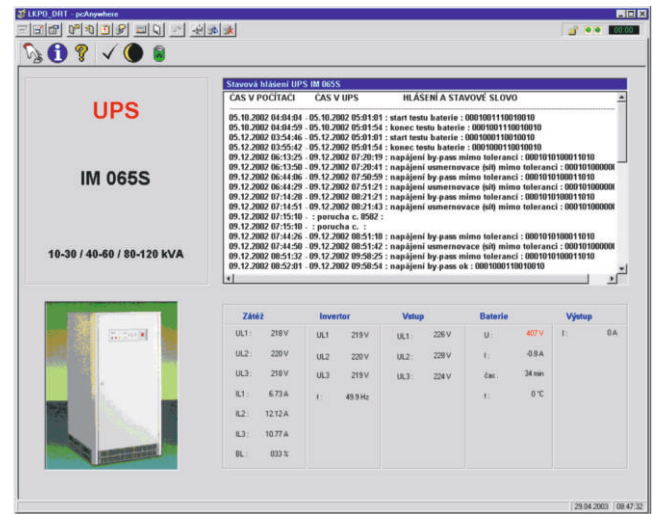


MONITORING UPS

Description/Properties

The UPS backgrounds own status via values:

- start and end test of battery
- operation for battery (time)
- operation - regime by-pass
- low battery
- supervision request

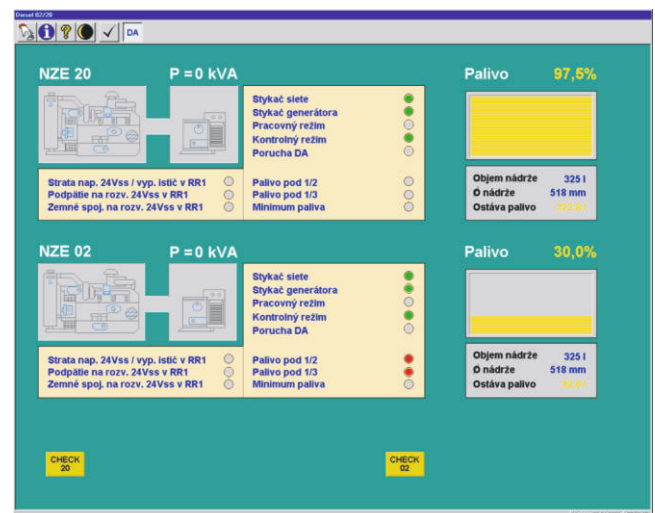


MONITORING EMERGENCY POWER SUPPLY

Description/Properties

The PS backgrounds own status via values (for example):

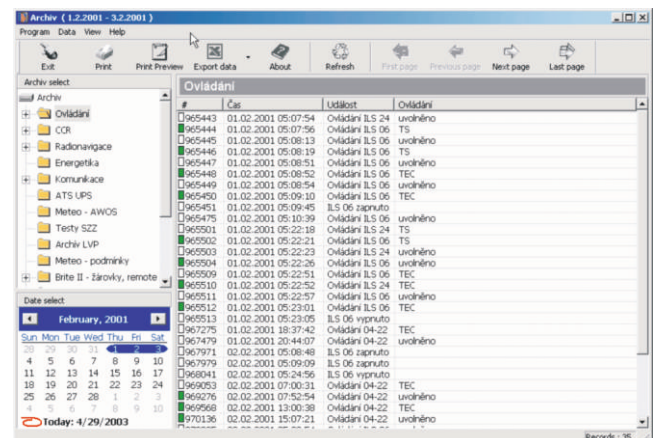
- fuel in %
- operation power supply
- status of battery
- fault PS



SOFTWARE FOR ARCHIVES

Description/Properties

- all the data concerning operation of control workstations and information workstations, commands, handing over of control, requirements concerning constant current regulators and monitored signals are archived at central archive
- the data are archived for 1 year, after elapsing of one year they are automatically being deleted
- printing of archived data is possible on printer, which can be connected to any control or informative workstation



chapter:

2.3

SOFTWARE



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