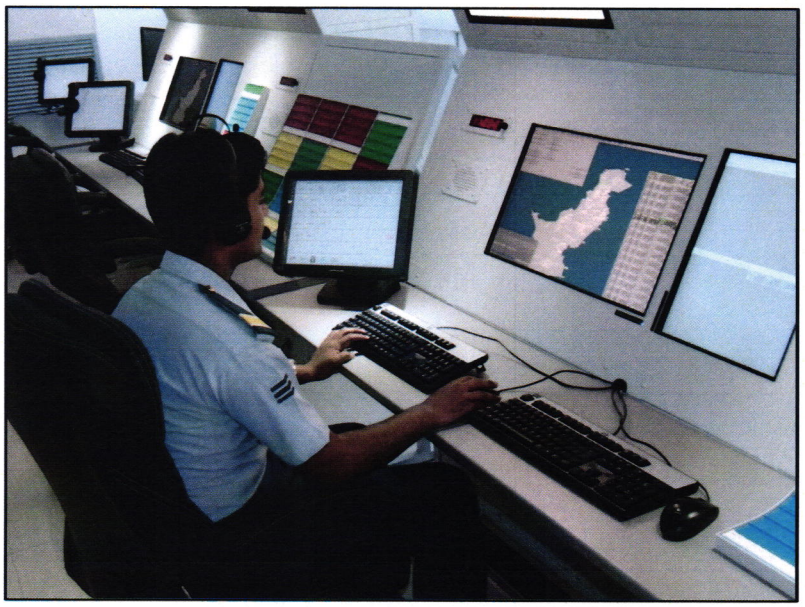
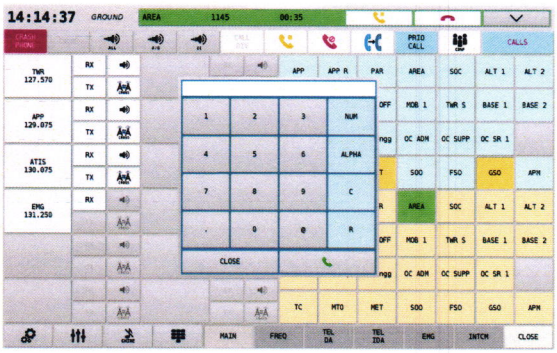
ARTISYS
aeronautical real time information systems

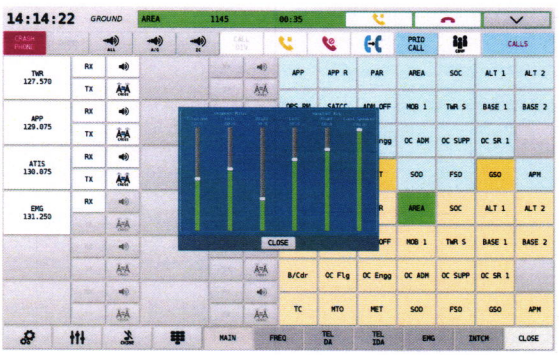
- VoIP
- fully digital outside and inside
- integrated Recording & Replay synchronized

VOICE COMMUNICATIONS SYSTEM

radios
telephones
hot lines
intercom
voice recorder
time server
interfaces





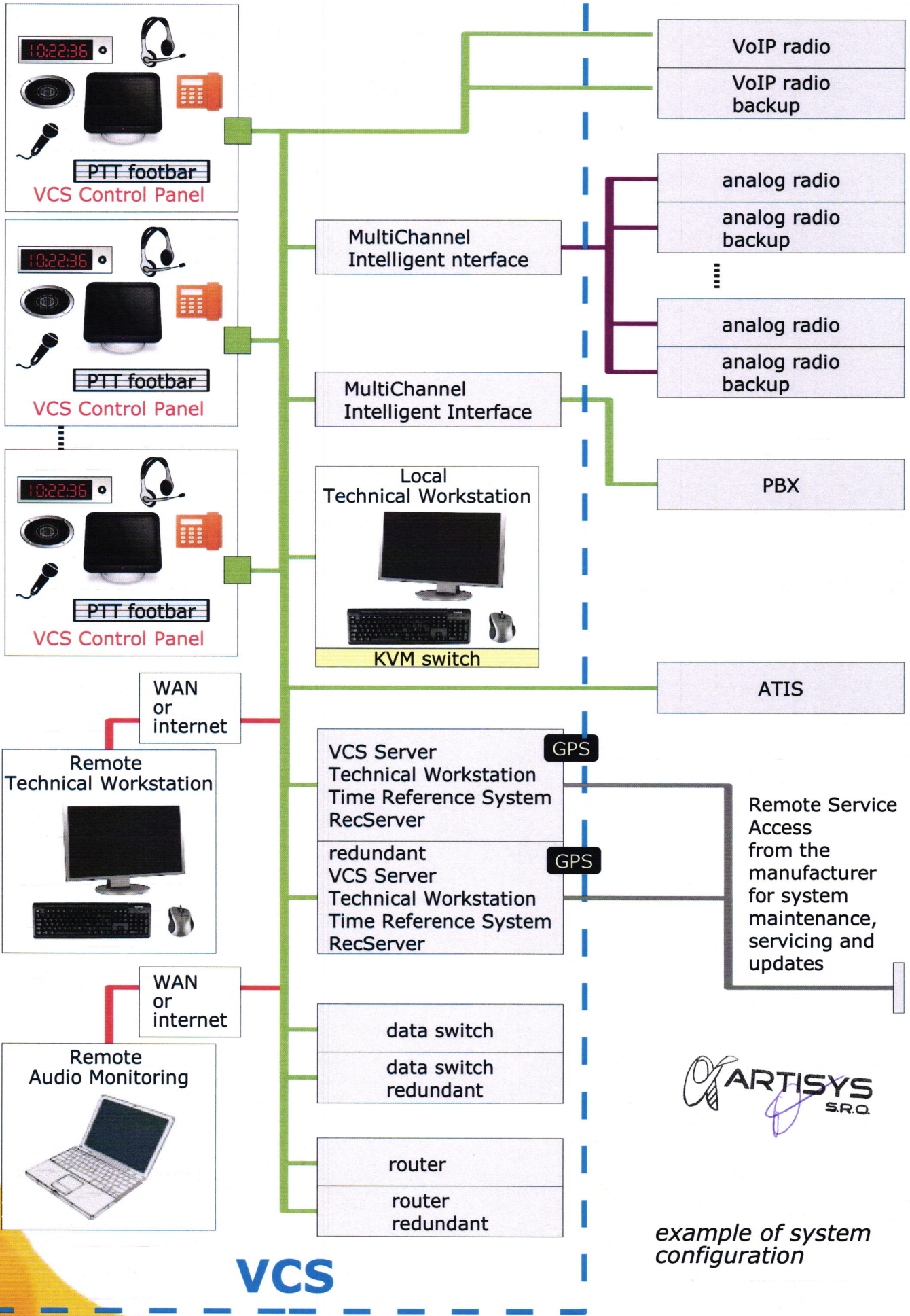


NEW QUALITIES

+ distributed intelligence in communication servers and operator positions
+ integrated time synchronized Recording & Replay System with precise time stamping
+ Intelligent Interface to T/R analog / VoIP and PBX
+ interoperable integration with other systems (ATC system, VCS, other systems)
+ scalable and expandable
+ excellent maintainability, easy to get spare parts
+ user configurable
+ new functions applicable without further hardware investments
+ fully programmable HMI and functionality
+ additional layers of functionality due to digital solution
+ redundancy, operational safety and security

ARTISYS S.R.O.

www.artisys.aero



example of system configuration

+ RADIOS (VHF - UHF)

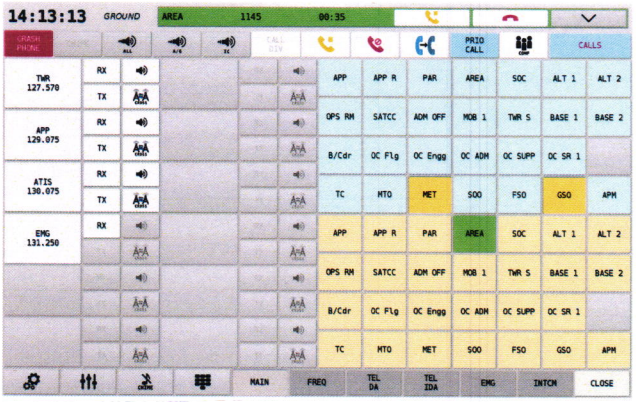
- 30 frequencies as minimum
- Tx and Rx selections
- squelch or VOX
- keying indication / blocking
- transceiver remote control
- best signal selection
- headset / speaker sound monitoring

+ TELEPHONES / HOT LINES

Indirect / Direct Access
call transfer / divert / hold / queuing
radio - phone, dial pad, conference calls, priority calls, monitoring, CLIP, busy station indication, chimes selection, volume control, remote transceiver control, BITE and other functionality is available. Connects a range of analog and digital telephones. User editable phone book and frequencies.

+ INTERCOM

Push the button and talk, multiple Public Address circles, for fast and flexible communication. Direct access to selected stations. Automatic self configurability.



+ CONTROL PANEL

Control panel is equipped with colour LCD with touchscreen 12" - 15" allowing dynamic HMI, perfect overview and easy access to all functions.

+ ACCESSORIES

- featherlight headset with mike and PTT, split ear
- second headset output (instructor)
- telephone handset w/wo PTT
- radio handset w/wo PTT
- footbar PTT switch
- table PTT switch
- extenrnal mike with PTT
- one or more loudspeakers with selectable channels routing, volume control
- monitoring headset
- jackbox.

example of headset Plantronics® with LEMO connectors

HERGA footswitch bar 80cm

LED clock with brightness control

example of ELO touchscreen 12"-15"

OPTIONS

INTEGRATED VOICE RECORDER RECORDING & REPLAY

Voice Recorder records & replays audio, optionally fully synchronised with video from an ATC system and VCS. Multichannel, selectable, variable speed, fast phrases search.

ATIS

Based on Voice Synthesis and fully digital solution, with Acoustic Language Kit.

SIMULATOR SPECIALS

Next to operational VCS functions it supports also all simulator functionality required for advanced teaching tasks, such as multiple virtual VCS systems for independent multiple simultaneous simulations with flexible time flow.
VCS can be integrated with simulator from a third party, run in master or slave mode.

TECHNICAL DATA

configuration
- single
- redundant
- various working position types
  - operational:
    - controllers
    - supervisor
  - simulator:
    - instructor
    - pseudopilot
    - coordinator
- scalable, extendible
- on-line reconfigurable

operation
- operational VCS
- simulator VCS
- multiple virtual VCS systems
- integrated communications
  radio + telephone + hot-line + intercom
- option: integrated Voice Recorder
- option: Replay Workstation
- option: Time Reference System + LED clock
- option: ATIS

interfaces
- T/R analog – VoIP
- interface to all common types of telephones lines
- TCP / IP
- NTP

integrated Voice Recorder
- storage / retrieve of digital recording
- synchronised video & voice recording & replay with optional ATC / ATM system interface
- input: all positions and audio sources
- communications investigation with fast search for phrases
- Replay Workstation
- recording & replay selected or all communications mixed
- export of recording to external media in standard formats

design
- Linux based
- open system, distributed architecture
- easily extendible by new functions
- state-of-the-art technologies
- industrial standards

services
- customised definition of the system
- functional skin - HMI design on demand
- audio routing on demand
- system extensions on demand
- optional interfaces to other systems
- maintenance available
- remote service support

features
- fully digital VoIP inside and outside
- programmable buttons and phone book
- instant replay 1 - 5 minutes
- remote operator
- remote radio access
- remote monitoring
- direct voice
- library of HMIs functional skins
- frequency response: as per used accessories
- headset volume limiter: yes
- minimal secure volume: yes
- background noise: as per used accessories
- audio volume control: each channel separately
- PTT: dry contact, ground
- voice recognition & synthesis

telephones
- DA and IA calls
- dial pad
- last number redial
- call transfer and forward
- call hold - queuing - selection - release
- conference calls
- priority / override calls
- monitoring
- intercom automatic configuration
- CLIP
- busy station indication
- split ear telephone / frequency
- chime selection - on / off - volume
- public address function
- interface: E1 / T1, SIP, PBX, LB and others

radios
- analog and VoIP
- display / selection of radio frequencies
- independent Tx and Rx selection
- main / standby radio selection
- squelch indication / keying blocking
- fully configurable audio routing
- single or multiple speakers
- frequency cross coupling
- frequency forward (in preparation)
- radio retransmission (in preparation)
- radio - telephone patching (in preparation)

intercom
- self-configuring
- multiple PA circles

ARTISYS SRO

PTT operation
- multiple PTT devices in parallel
- lockout if busy
- configurable priority rights

Technical Workstation and maintenance
- alarm reporting and failures logging
- equipment & positions status monitoring
- remote maintenance monitoring
- system BITE
- position self-test / diagnostics
- Remote Service Access

TÜV SÜD

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