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Mark V operator interface

One of the recent developments is that the OEM no longer supports every component of the Speedtronic mark IV and V control system.

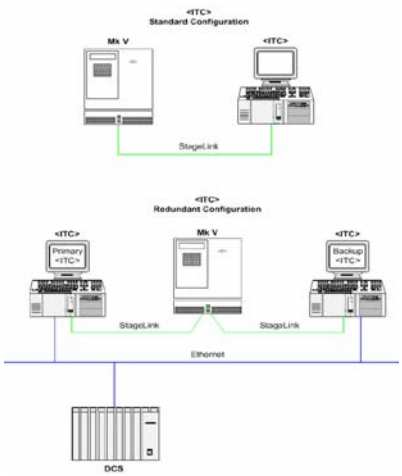
Especially, the availability of the mark V <I> panel Arcnet card (PCA 198 CXB), which was manufactured by contemporary controls, has become problematic. Although we can still repair the Arcnet card for you, and we do have a replacement kit available, we felt that this solution still did not solve the problem because of the simple fact that not everyone is used to DOS anymore.

And for the mark IV, well, the burnt-in CRT tubes can be repaired, we also deliver complete replacements, but a more modern operator interface may very well be on the wish list… for someone who uses the Mark IV panel with the CSF interface this is now within reach.

Many customers, like yourself, have asked us if we had a solution for these problems. It has taken us some time, but today we can introduce you to a system that has already passed its test-phase with flying colors and that will eliminate your problems; a truly state of the art, up-to-date system that is easy to use and that is available at an affordable cost. For the implementation there are no changes to your control system to be made, no prom changes are necessary, nor is there anything that needs to be done on the turbine side. What a relief ! Perhaps one of the main reasons that at this moment over 120 control panels are operated with it.

<ITC> SH is an operator interface solution for integrating various control systems into a single operator interface, capable of full redundancy.

It is built using VTS™ MS Windows-based operator interface software. An example of a system configuration is shown below.



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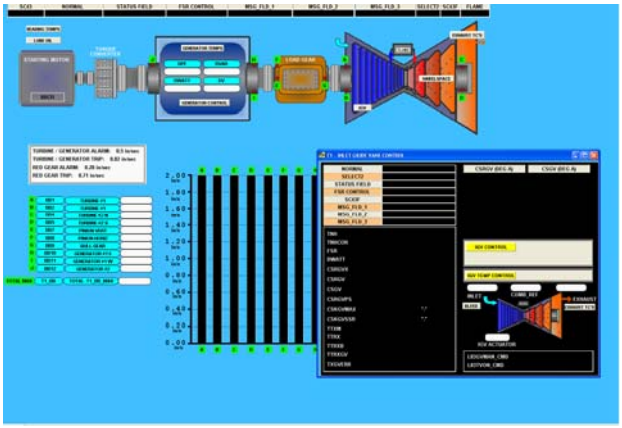
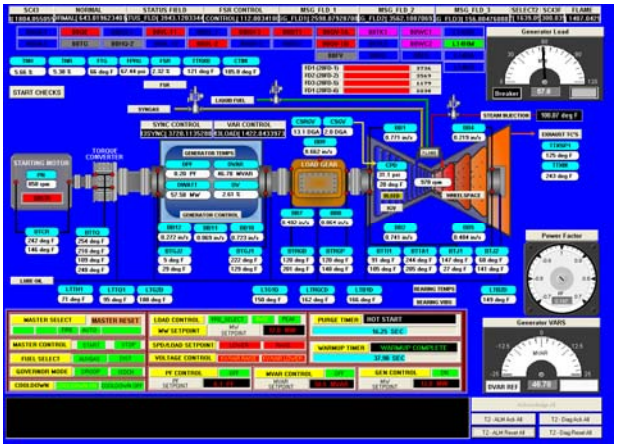
It is capable of communicating

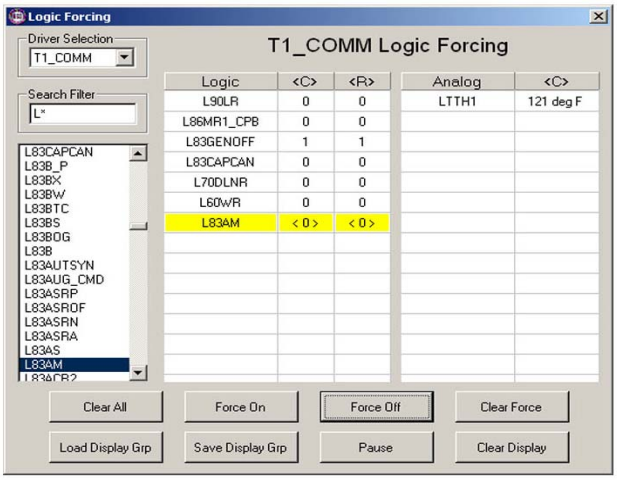
- with GE Speedtronic Mark IV + panels using the CSF interface (Serial and/or Arc net versions)
- directly with any Mark V turbine control panel over the existing StageLink LAN.
- with any control system capable of industry standard MODBUS communications (either serial or Ethernet)

In as little as 20 – 30 seconds after starting the application live data will be displayed on the screen, and it will be possible to issue commands to Mark V. Hence, it will also work for you !





Screen dumps are from <ITC>



Screen dumps are from <ITC>

Just as with the OEM's operator interface

- The LVDT feedback can be calibrated
- Control constants can be modified
- CSP changes can be made, compiled and downloaded using the same files and steps
- I/O configuration can be changed and downloaded.
- 32HZ troubleshooting data van be obtained using a windows-based utility which automatically, graphically displays the data and is capable of saving it to a comma-separated file (for import to any spreadsheet or data analysis program)

This document only generally describes the <ITC> application. For more information you can contact your local distributor:

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And it also has the following features

- changes made to the <ITC>™ application on the designated server can automatically be copied to all clients.
- No need for manual copy-and-paste actions with floppies or windows-explorer.
- A redundant communications server can be installed, providing hot backup for the primary server for increased reliability and availability.
- A built-in Sequence of Events logger that provides for time-stamped (to 0.001 sec) events such as physical digital inputs, logic variables and alarms. Events are not cleared when the turbine is re-started.
- Future mark V panel upgrades can be accomplished with <ITC>TM because it uses the same configuration files as any <I> or Mark V <HMI>.
- Online monitoring

Can your operator interface…

	<I>	GE HMI	<ITC> SH
Communicate directly with Mk V panels using only the existing StageLink	√	√	√
(i.e., not through an intermediate computer)?			
Modify the control Sequence Program, compile the changes, and download to MkV?	√	√	√
Modify I/O Configuration and download to Mk V ?	√	√	√
Modify Table Files (including Control Constants), compile them, and downliad to MkV	√	√	√
Operate in a windows-based, multitasking environment?		√	√
Communicate with Mk V panels using an off-the-shelf,		√	√
non-proprietary ARCnet network interface card?			
Call(mobile, land-line) or page your operator when an alarm is annunciated?		√	√
Annunciate audible alarms from the operator interface PC?		√	√
Automatically copy screen edits to all other operator interface PC's? (Ethernet LAN require)			√
Automatically copy modified Mk V configuration files to all other operator interfacePC's?			√
(Ethernet LAN required)			
Alarm when the value of any Control Constant in any location (operator interface files,			√
EEPROM, RAM) is changed?			
Archive operating data for your turbine control panel(s) for up to one year?			√
(longer peroids are optional)			
Back up critical data using RAID-5 disk array?(optional)			√
Automatically display data obtained with one of the VIEW tools in graphical format?			√
Operate and troubleshoot your unit from a wireless tablet PC using the same displays			√
as stationary operator interfaces?(optional)			
Force logic signals from any display(with knowledge of the appropriate password)?			√
Print color-coded alarm messages to a line printer?			√
Share data with any DDE or ODBC-compliant application?		√	√
Save data to CD-RW or optional DVD-R drive using drag-and-drop method?			√

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Can your operator interface…

	<I>	GE HMI	<ITC> SH
Double as a DEC MicroVAX SmartRemoteTM replacement?			√
Communicate with SpeedTronic MkIV panels--either via serial or CSF?			√
Communicate with SpeedTronic MkVI panels--on the Unit Data Highway?		√	√
Communicate with Baily Net90 or Infi90 distributed control systems?			√
Communicate with AllenBradley or GE-Fanuc programmable logic controllers?			√
Communicate natively with Siemens-Moore APACS Programmable logic controllers?			√
Archive operating data from other control systems as well as from the turbine control panel?			√
Configure numerous reports from any connected control system and save-,print-, or email them on a periodic basis?			√
Serve as an integrated operator interface with a 'common look and feel' for nearly every control system in your plant?			√
Execute complex overall plant control schemes through connected control systems?			√

We have two different options available for you

Close to panel: <ITC>-SH (Communication server with Historian):

1. Communicates to the Speedtronic mark V via Arcnet and has historical data capabilities. Features are mentioned in the table on last page.

2. For remote Locations: <ITC>-C (Client). There is no direct communications via ARC net between the client and the Speedtronic Mark V panel, but the data is processed through the <ITC>-SH computer via Ethernet. This option is also suitable for communicating with multiple Communication Servers.

If you are interested, please answer the following questions so that we can make you a quotation:

- For which mark V panels (turbine type and location) do you need an operator interface ?
- Must the Operator interface be available on a remote location ?
- Do you already have a certain timeframe in mind for installing the operator interface on site ?

If you need more information or if you would like to receive a quotation please do not hesitate to contact us at support@speedtronic.com. In case you have technical questions we prefer that you send them to us by email – we will get back to you as soon as possible.

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