

Future Cockpit

Robotoid Human (Wearable Cockpit)



Picture from DARPA*

Yet, there are still many tasks requiring **human ability** in construction, industry, rescue, nursing, elderly or handicapped care, military and so on.

Human ability:

- Activity, Multitask
- Human sense, Sensibility
- Decision making, Memory

Probable solution (Present)

- Humanoid
(a human-like automatic Robot)

New solution

- Robotoid Human (Wearable Cockpit)

A cockpit normally means an operating space in an airplane, a spacecraft or a racing car. Therefore, a cockpit requires comfort and safety for on-board operations.

However now there have been already some operational modes without boarding. A Cockpit is no more only a space on the machine, but also an operating tool.

A Humanoid has still many difficulties for practical use. When we can wear a cockpit which strengthens the human ability, it makes human activity more effective.

Recent research areas:

Operation

- 1) Tele-Operation (remote control / monitoring)
- 2) Multi Operating / Monitoring

Enhancement of human ability

- 3) Embedded Chips or System
 - o Memory, Communication between Brain and System
- 4) Wearable Computer
 - o Augmented Reality System; Vision, Hearing, partly Memory
 - o Decision making, Analysis, Management
- 5) Exoskeleton System
 - o Tactile sense, Physical ability, Body protection

Wearable Cockpit enables:

- Sensitive and decision-based work more effective, comfortable and safe.
- Additional work beyond operation, Ubiquitous operation of several machines.



A use for fireman

*DARPA : Defence Advanced Research Projects Agency