Suggestions to Alleviate the Supervisor's Challenge

Many software engineers prefer new system development programs to O&M assignments, because they perceive that O&M is limited to code updates and primarily corrective maintenance, is performed using obsolete equipment and technology, and that they are unable to participate in all "phases" of software development. Software supervisors must dispel these notions. O&M assignments can be extremely beneficial to software engineers, especially as a first assignment with a new employer if they are teamed with other personnel. Be sure not to isolate a new employee at a customer or subcontractor facility. O&M realities are shown in the chart below.

Perception	Reality
Corrective maintenance only	• Corrective maintenance is only one facet of code updates. • Code updates are only one of numerous O&M activities.
Obsolete equipment / technology	• Insertion of new hardware is often part of O&M. • Insertion of new COTS is often part of O&M. • Work with real equipment (hardware) not simulators.
Limited participation in development phases	• New versions or builds are developed using an accelerated process model. • There is more opportunity to participate in I&T activities.
Other Disadvantages of O&M	**Other Advantages of O&M**
Employees segregated from home facility (if work is performed at customer / prime contractor facility)	• Stable project environment and no start up politics. • Opportunity to work with a large variety of software and documentation. This can be both good and bad. • First hand exposure to operational environment and real user circumstances. • Exposure to all phases of develop in short period of time. • Opportunity to support new business pursuits if working at the customer's facility.

Conclusion/Summary

O&M has many activities and is a vital phase in the life cycle. The planning equation for the O&M phase is comprised of people, activities, locations, and the reasons to develop and deliver the product according to the plan as shown in the chart below.

The Planning Equation

Planning =	Who	+ What	+ Where	+ Why	+ How	+ When
	• Original developers • Those willing to relocate or travel • Those with special aptitude for problem solving • Those with good customer interface skills • Those who want to work with operational systems	• Code maintenance • Installations • Daily site maintenance • Feasibility studies • Plus much, much more	• Remote locations • Co-located with users • Multi-locations • Multi-development environment	• Ensure that operational version is stable • Modify, correct, enhance for further use	• Incremental deliveries • According to development processes and procedures	• After (part of) original system is operational • For as much as 5 times the original development time • Quick enough to keep users satisfies