

Ensuring after market support issues are considered during the design and marketing of new products

- Logistics Engineering
- Maintenance Planning
- Supply Support
- Safety & Human Factors
- Training
- Technical Documentation
- Packaging, Handling, Storage, & Transportation

In today's consumer world, customers demand and expect after market support for the products they buy. Customer service centers, 1-800 numbers, and consumer surveys all point to greater responsibilities for product makers. How do successful companies satisfy consumers and capture greater market shares? One way is to consider after market support early in the engineering and manufacturing processes. The U.S. military has successfully used this technique since the 1960's calling it "Integrated Logistics Support". This technique involves making functional experts in the areas of logistics engineering, maintenance, supply support, training, technical documentation, facilities, and packaging, handling, storage, and transportation part of the design or acquisition teams. This approach provides a disciplined, unified, and iterative approach to (1) integrate after market support requirements into system and equipment design; (2) develop after market support objectives that are consistent with operating scenarios; (3) provide after market support at an affordable cost.

Logistics Engineering

- What is the expected reliability of the product?
- Can maintainability be designed into the product?
- Can high failure parts be made more accessible?
- Can we use standardized parts that are in other products?
- What equipment will I need to repair the product?
- Do my technicians need additional training?

All questions that that must be considered when designing new products. Our experts at JHolcombe & Associates bring years of experience in performing after market support analyses and reliability and maintainability efforts.

Maintenance Planning

- When an item fails, where do I repair it? Service center or ship back to central depot?
- Should I upgrade facilities and support equipment and repair the item in-house?
- What skills do my technicians need?
- What turnaround time do I expect?
- Based on analyses by Logistics Engineering, what is my expected workload?

By using proven methodologies, JHolcombe & Associates can help you answer these critical questions before you begin production, not when the first broken item comes in the door.

Supply Support

- What spares do I stock?
- Where?
- How many?
- Are my sources qualified? Do I need multiple sources?
- Should I buy spares along with my production quantities?
- Is shelf life a consideration?

JHolcombe & Associates can help you develop a well thought-out supply support analysis that integrates production, sales, inventory, and distribution and uses proven forecasting methodologies.

Safety & Human Factors

No matter how good the design of equipment/process, if it cannot be operated and maintained safely, it is unacceptable. JHolcombe & Associates professionals can devise a program for your organization that will continually evaluate the evolving equipment design to identify potential safety hazards and assist your organization in resolving safety issues.

All items of equipment, with few exceptions, require human interaction for operation, maintenance or both. JHolcombe and Associates can help your organization optimize this man-to-machine interface by helping incorporate human factors engineering into your product, process or facility design.

Training

- What skills do my technicians need?
- Do my technicians need licensing and certification?
- How do I provide training--in-house or contract?
- How often do I train?
- Do I consider some new technologies like video, computer based training (CBT), simulator?
- Do I need a formal records keeping system?

JHolcombe & Associates professionals have hands-on experience in developing and presenting training courses. We will work with customers to determine what type of training is necessary and how training should be integrated with business activities and performance criteria.

Technical Documentation

- What documentation do I provide the owner?
- What is needed in the repair facilities?
- How do I produce it?
- Can we produce on demand instead of batch quantities?
- How do we incorporate changes?
- How do I maintain accurate configuration management data?

JHolcombe & Associates can help automate the technical publications process and integrate information from different parts of your organization, and with suppliers and customers to support expedient customer service. This results in ready access to information, improved customer service, better control of change management, and more accurate and timely information distribution. We have extensive experience in developing, publishing and maintaining documentation for major firms in both the aerospace and automotive

industries. New imaging techniques coupled with state of the art technologies help minimize technical documentation costs while providing error free documentation.

Packaging, Handling, Storage, and Transportation (PHS&T)

It doesn't matter how good a product or service is, or how well it performs, if it can't be provided to the user in a usable condition. This is the purpose of PHS&T and performing it poses some serious questions:

- What is the design of the package?
- How can I maximize cube during storage and transportation?
- Bar coding?
- Any hazardous materials?
- Shelf-life items?
- Security issues?

Our professionals can answer these and other PHS&T questions by planning, developing and providing you the tools to manage the activities to ensure that your product/service is serviceable when it reaches the ultimate user.

Count on us

JHolcombe & Associates can help you perform cost-benefit analyses on your total after market support program. In addition, our skilled professionals have vast experience in performing life cycle cost analyses so you can decide on the best way to support your product. Most importantly, we can help you translate your after market support planning to a real competitive advantage.

Credentials

JHolcombe & Associates have developed integrated support systems for:

- Ground and airborne intelligence and surveillance systems
- The F-117 Stealth Fighter
- International Space Station
- Aircraft (E-2Cs, P-3Cs, E/F-18s, Aircraft Carrier Air Wings)