

FINAL REPORT

SMALL BUSINESS INSTITUTE PROGRAM

MANUFACTURING SUPPORT SERVICES INC.

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Management 390

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Preface

The attached SBI report is intended to help Mr. Roger Wesson. It is written by Constantinos Bovolis, Yansi Eraslan and Tolga Ergul. Every reasonable attempt has been made to present reliable and accurate information. Much of the analysis is, of necessity, subjective in nature and is based on personal interviews and team observations. Accordingly, no warranties or promises of accuracy are made by the writers, the faculty, or staff of the Small Business Institute. Furthermore, the University of Connecticut, its faculty and staff, and the writers assume no responsibility or accrue any liability for the contents of this report or any portion thereof.

This report has not been and will not be used by the student study team, for any other purpose without the written consent of Mr. Roger Wesson and Dr. Donald Huffmire.

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Confidentiality and Participation Agreement

In consideration of my being selected for and being permitted to participate in a project for the provision of advice and assistance to small businesses, jointly sponsored by the University of Connecticut, School of Business and the United States Small Business Administration, and thus receiving the increased educational experience that will result from my participation, I agree as follows:

1. I agree that I will treat in strict and absolute confidence all information received by me from any business firm or person requesting assistance of the kind to be provided under this project. The only exception of this commitment will be other members of the Project Team and the faculty members of the University of Connecticut who will supervise the project.
2. I agree that I will not recommend to any business firm or individual requesting assistance the purchase of goods or services from sources in which I or other members of the Project Team or the sponsors may be interested, nor will I accept fees, commissions, gratuities, or other benefits from any firm or individuals I or another member of the Project Team may recommend to the business firm or individual so requesting assistance.
3. I certify that I am not now involved in a business that competes with my client and will not be involved in such a business during the period and immediately following the consultation.
4. I will maintain confidentiality of any client information permanently; I will never use or discuss any client information outside the classroom except with the client or engage in any direct competition with the client during or immediately following the case.
5. I agree that I will not accept any fees, commissions, gifts, or gratuities from the SBI client nor serve on their advisory board. I agree to avoid any other appearance of a conflict of interest.
6. I certify that neither myself nor any immediate family member has any interest in the ownership of the SBI client's business.

GIVEN at Storrs, Mansfield, Connecticut, this fourteenth day of December 1994.

Constantinos Bovolis

Yansi Eraslan

Tolga Ergul

| |
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| EXECUTIVE SUMMARY |
|--------------------------|

PRELIMINARY PLAN: FORMATION OF PRATT & WHITNEY MANUFACTURING SUPPORT SERVICES

We have developed a preliminary plan as the first step of the business plan. The new company will operate at each Pratt & Whitney facility within Connecticut. Three important parameters appear to be the competitive advantages that Pratt & Whitney can gain:

1. Improved Cycle Times
2. Better Quality Service
3. Decreased Manufacturing Costs

The new company has four objectives, each of which is of vital importance for its future:

- Assistance to Pratt & Whitney to achieve its major objectives (market share, customer service, quality).
- Formation of a highly experienced and specialized work force.
- Competitiveness and dominance in the domestic market.
- Growth in the international arena.

These objectives must function altogether and should not be mutually exclusive. We identified several critical points required to achieve these objectives. These points are:

- Pratt & Whitney's cooperation by providing MSS facilities, equipment, documentation and spare parts.
- Formation of a personnel plan that will allow MSS to establish its work force.
- Development of training programs.
- Pratt & Whitney's financial support.
- Assistance in the build up of networking and contracting.

Therefore, we believe that a strategic partnership between Pratt & Whitney and Manufacturing Support Services, Inc. will be beneficial for both parties (win-win situation).

COMPANY DESCRIPTION

"Pratt & Whitney Manufacturing Support Services" is a full manufacturing support services company. It will provide critical repair and maintenance services to manufacturing corporations within Pratt & Whitney. The purpose of MSS is to help Pratt & Whitney cut costs, earn the best possible returns in the short run, reduce the cycle time so as to provide the best customer service and eventually increase the market share.

The services that MSS will provide will be offered in a three tier structure:

1. Base Services
2. Process Certification
3. High Tech. Repairs

The new business will encompass all manufacturing operations throughout Pratt & Whitney (CONNOPS) utilizing one organization to provide services; therefore, eliminating the need for many smaller service organizations, as well as outside service vendors. These services will be on site and on call 24 hours per day. The resources needed in terms of spare parts, documentation and work force are available at this moment within Pratt & Whitney, or they can be reached easily. The same type of test and repair equipment can be utilized in all areas, since the need is the same for the whole organization.

A centralized location where all resources (skills, spare parts, test equipment, technical documentation) will exist and be used as the base of operation, and our proposal is the East Hartford facility. In the short-run, services will be provided all over the State of Connecticut and allocation of resources will be made based on the needs that Pratt & Whitney's facilities will have. 1) East Hartford, 2) Rocky Hill, 3) Middletown, 4) North Haven, 5) Cheshire, 6) Southington are the facilities that will be serviced. A quick action response team will always be ready to be dispatched to any area/facility that has a specific need.

This is a win-win situation for both Pratt & Whitney and Manufacturing Support Services. Pratt will benefit from this partnership in terms of profits, customer response and loyalty, product quality, lower costs and employee security. The creation of new jobs will eliminate any lay-offs and it will generate new positions as the company grows. In addition, new markets will appear and the two companies can penetrate them as partners.

The long term benefits are basically focused on the increased savings in maintenance costs, by at least 50%. Manufacturing Support Services offering a variety of specific service applications, will create a dynamic strategic partnership beneficial to both parties. The new organization will help Pratt & Whitney become strong and competitive for the future. Market dominance in the Jet Engine Manufacturing industry and profits coming from new markets will be achieved.

ORGANIZATION AND PERSONNEL PLAN

MSS has the opportunity to find all the specialized, well trained and experienced technicians from the currently employed work force. Our recruitment and selection plan gives priority to current workers. They will be offered the option of staying with the new company as salary based workers. If needed, we can utilize some additional human resources from the labor pool—those that have been laid off previously. As growth will be coming, this might appear to be a necessity for the new company.

In the long-run, we will have to recruit new people who will be given appropriate training. Training rooms will exist in all the facilities and trainers will be the experienced workers who are not part of the active work force. Therefore, training and development will become a strong incentive to attract qualified labor to the new company (MSS). In addition, cross-training will exist and will help our company develop a strong, very qualified work force, ready to provide all types of services not only within Pratt & Whitney, but also outside the company.

Overall, the well educated, well trained workers will be utilized in various ways by the new organization. Productivity will increase, costs will decrease substantially, operations will become more effective, quality service will be the outcome and finally Pratt & Whitney will be able to keep its customers satisfied by meeting the required deadlines. The ultimate goal of regaining the highest market share in the industry can be achieved in the long run.

The estimated number of personnel we are planning to start with is 350 workers. Around 60 to 70 of these workers will be employed at the base of our operations in East Hartford, while the

rest will be allocated according to organizational and service needs to the other five facilities all over Connecticut.

One of the major contributions of this strategic partnership will be the financial benefits. The current salary and wage structure is very costly and one of the reasons of inefficiency in the maintenance process. In the existing salary structure, there are a total of 350 workers and managers whose approximate salaries are around \$28,000,000/year. Including the benefits of \$10,920,00/year for these personnel, salaries and benefits cost roughly \$38,920,000/year.

As for the proposed structure, the estimated salary costs would be around \$13,848,000/year, and the benefits would be the same as the existing structure (\$10,920,000). So, the total cost of salaries and benefits will be approximately \$24,768,000/year.

With the proposed cost structure, there is an expected savings amount of \$14,151,000/year which is a 36.5 percent improvement. The details regarding the financial benefits are given in the appendices 13 and 14.

FINANCIAL PLAN

Our proposal is that we should have a strategic partnership with Pratt & Whitney. Manufacturing Support Services is considering to have 80-85 % of the equity and Pratt will get the rest. In addition, we request that Pratt has to provide existing spare parts, documentation libraries, test equipment areas, tools-electronic, mechanical and special applications, as well as facilities within the different locations. This can be offered as a non-equity part, which will allow the new company to operate competitively. Additional help, such as market studies, the use of existing licenses and certifications will be of use for MSS.

The financial help provided by Pratt & Whitney to the new business can also include loans for starting up the business and if necessary, loans for growing the capital. It is of vital importance for us to get any possible help of that form from Pratt.

WHAT DOES PRATT & WHITNEY NEED?

Pratt & Whitney wants to maintain its market share and become the market leader again. It wants to regain customer confidence by delivering orders on time. In order to be competitive in the market, the company has to be cost competitive. Diversifying into new businesses through partnerships and joint ventures is another thing the firm may want to consider.

The customers of Pratt & Whitney are looking forward to reduced cycle times. Therefore, one of the prioritized actions should be the reduction of cycle time in the manufacturing process. To reduce the manufacturing costs, we think that Pratt & Whitney needs to decrease the manufacturing errors and scrap parts.

WHAT CAN THE NEW MANUFACTURING SUPPORT SERVICES DO FOR PRATT & WHITNEY ?

We believe that Manufacturing Support Services will be able to provide the following benefits to Pratt & Whitney:

- Decrease the cycle time thanks to well-maintained manufacturing facilities.
- Provide the most qualified and experienced manufacturing maintenance and repair service organization in the world.
- Reduce the manufacturing costs by having reliable equipment.
- Decrease the maintenance costs by half by restructuring.
- Reduce costs by being less dependent on outside vendors.
- Provide engineering assistance and consultant services.
- Increase quality of products by having more accurate and reliable machines (Certified calibrations, expert mechanical alignments and accurate instrumentation).
- Provide training and cross-training programs for manufacturing services employees.

- Implement a Total Preventative Maintenance Program (TPM).
- Provide 24-hour service and emergency teams for:
 - ↳ Electronic problems,
 - ↳ Mechanical problems,
 - ↳ Environmental/spills/waste treatment facilities,
 - ↳ Instrumentation/calibrations/certifications.

WHAT CAN PRATT & WHITNEY DO FOR MANUFACTURING

SUPPORT SERVICES?

Pratt & Whitney can help MSS build a bright future in the domestic and international market. Thanks to a partnership, Pratt & Whitney can create a chance for MSS to employ skilled workers for the process of manufacturing maintenance. We hope that in order to grow and be competitive, we need the internal help and support.

Manufacturing Support Services believes that to motivate and to provide the commitment of the employees, we have to give them health care benefits, retirement and savings plans, and profit sharing options. Pratt & Whitney will assist MSS to provide its employees the above security plans.

Expansion into new markets is one of our targets and one of our long-term goals too. At the beginning, we will focus on the local area, meaning that we will operate only within the State of Connecticut. Then, due to expected growth, we can operate in the region, no matter what this region might be (i.e., New England, East Coast and a few other States, etc.). After that, our plans are to focus on the domestic area, meaning all over the United States.

Finally, we will operate internationally. Pratt & Whitney's role is very important for our expansion. The high future potential for machine retrofitting as electronic, mechanical and instrumentation support offers a great opportunity for expansion. Of course, a new organization will have to be established exclusively for retrofitting, but the experienced and specialized human

resources needed for this organization will be available at MSS (possibility for transfers). Customer service contacts are also of major importance, in order for MSS to build a good networking system. Building maintenance contracts (HVAC) can be utilized as another area of outsourcing.

OPERATIONS PLAN

The proposed partnership will help Pratt & Whitney improve several areas that for some reasons have not been updated. The following areas are advancing more and more and they should no longer be ignored:

- þ Assembly and Test operations
- þ Laser technology areas
- þ Inspection departments
- þ Machining operations
- þ Vacuum systems, heat treat furnaces
- þ Waste treatment areas
- þ Plasma spray operations
- þ Surface treat areas

These areas are below acceptable levels of efficiency, and can be significantly improved. Many changes and advancements have taken place in the last two years. Therefore, training is essential to keep abreast of these changes. Continuous improvements occur, thus continuous evaluations are needed if Pratt wants to keep up with technological advancements. Better informed and educated technicians will turn out to be the most valuable asset of the new company. Pratt & Whitney did not keep up with these changes and that is one of its major problems. If we take into consideration that costs have to decrease by 50%, it is the perfect time to start setting up a program to organize our efforts.

Pratt & Whitney Manufacturing Support Services is a complete service company. The services offered will include instrumentation repair and calibrations, engineering assistance and consulting services, electronic and electrical support, mechanical and plumbing support and finally it will provide a Total Preventive Maintenance Program (TPM) that will encompass all Pratt & Whitney's facilities within Connecticut (CONNOPS). The specific areas in which these services will be offered are the following:

- Machining Operations.
- Jet Engine Assembly & Test Operations.
- Waste Treatment Facilities.
- Surface Treat and Plating Facilities.
- Quality Assurance Inspection Areas.
- Non-Destructive Test (NDT) Inspection Areas.
- Vacuum Systems, Heat-Treat Areas.
- Spin Balance Operations.
- Laser Holography Inspection Areas.
- Laser Machining Operations.
- Personal Computer (PC's) Systems.
- Manufacturing Engineering Research Lab (MERL).
- Weather Stations.

Refer to the supporting documentation section for a detailed listing of services for each area listed (Appendix section, from 1 to 12).

APPENDIX

SECTION

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Appendix 1

Machining Operations

Area and Location:

The following operations will be available at East Hartford, Rocky Hill, Middletown, North Haven. Buildings indicated in parenthesis refer to East Hartford facilities.

| | |
|------------------------|-----------------|
| General Machining | (L-Building) |
| Overhaul and Repair | (M-Building) |
| Development Operations | (J&K-Buildings) |
| Hollow Fan Blade | |

Responsibility:

Calibrate, repair and maintain a wide variety of machines throughout (CONNOPS). This is to include electronic, electrical, mechanical alignments and updates to machines, as well as machine installations. All types will be serviced (CNC, NC, ETC).

Responsible for:

| | | | |
|---------------|------------------|-------------------|--------------|
| Allan Bradley | Drill Presses | G & L | Maho |
| Bendix | Fanuc | Industrial Lasers | Milacron |
| Bullard | Furnaces | Jones & Lamson | Spray Booths |
| DeValige | General Electric | K & T | Sunstrand |

| |
|-------------------|
| <i>Appendix 2</i> |
|-------------------|

Machines and inspection Readouts**Areas and Locations:**

The following operations will be available at East Hartford. Buildings indicated in parenthesis refer to East Hartford facilities.

| | |
|------------------------|------------------------------------|
| Manufacturing | (East side, West Side, L-Building) |
| Overhaul and Repair | (M-Building) |
| Development Operations | (J&K-Buildings) |

Responsibility:

Calibrate, repair and maintain a wide range of digital and analog measuring systems and readouts.

Responsible for:

| | | | |
|---------------------|------------|----------------------------------|----------|
| Anilam | Farrand | Itek | Sony |
| C-Tek | Federal | Jones & Lamson | Teledyne |
| Cordax | Heidenhein | Jucker & Peace | Tracers |
| Dermatron | Hite- | Marposs | Warner- |
| | Tronic | | Swasey |
| Digi-Check | Illitron | Photo Densitometer | Zeiss |
| Eddy-Current Meters | Involute | Rockwell-Wilson Hardness Testers | |

Appendix 3

Jet Engine Test Facilities

Areas and Locations:

The following operations will be available at East Hartford.

Production Test

Responsibility:

Service and calibrate all instrumentation and related wiring used in Jet Engine testing. Service electrical, electronic, and mechanical needs (Calibrations are done on a 13 and 26 week frequency required by USAF). Assist engineering in modifying existing electronic systems and assisting in the development of new electronic devices needed for new engine designs.

Responsible for:

Maintaining 10 Jet Engine Test Cells. Each cell consists of many different types of instrumentation such as:

| | | | |
|--|------------------------|-----------------------------|--------------------------------------|
| Angle Systems | Engine Control Modules | Speed Interface Modules | Vibration Systems (Fourier Analysis) |
| Calibration Control Module | Frequency Systems | Temperatures Systems | Voltage Monitors |
| Computer Interfaces (analog and digital) | Fuel Flow Systems | Thrust Systems | |
| Computerized Hoist Systems | Pressures Systems | Vibration Interface Modules | |

Appendix 4

Waste Treatment Facilities

Areas and Locations:

The operations will be available at East Hartford, Rocky Hill, Middletown and North Haven.

Responsibility:

Calibrate, repair and maintain computer, electronic and pneumatic systems, which are used to monitor, control and analyze processes such as ORP, PH, temperature, levels, flows, cyanide, chrome, acids, and caustics. Provide electrical and mechanical support. Maintain the standard set by the Environmental Protection Agency.

Responsible for:

Many various control systems consisting of computer and electronic equipment such as:

PH control and monitor systems:

- PH Probes
- Transmitters
- Preamplifiers
- Gate alarms
- Controllers and chart recorders (L&N, Bristol Badcock)
- Acid pumps control circuitry

ORP control and monitor systems:

- Probes
- Transmitters
- Controllers (Bristol-Badcock)

Ultrasonic flow and level detectors

- Transmitters
- Monitors and recorders

Appendix 5

Surface Treat and Plating

Areas and Locations:

The following operations will be available at East Hartford. Buildings indicated in parenthesis refer to East Hartford facilities.

Manufacturing
Overhaul and Repair (M-Building)

Responsibility:

Calibrate, repair and maintain digital and analog ammeters and voltmeters, temperature controllers and rectifiers. Provide electrical and mechanical support. Calibrate, repair and maintain a hydro-carbon analyzer in surface treat area.

Responsible for:

A numerous amount of instrument such as:

| | | |
|--------------------------|---|-----------------|
| DC Ammeters | = | Digital, Analog |
| DC Voltmeters | = | Digital, Analog |
| Temperature Controllers | = | Digital, Analog |
| Portable Rectifiers | | |
| PH Controllers | | |
| Conductivity Controllers | | |
| Hydro-Carbon Analyzer | | |

Appendix 6

Plasma Spray Facilities

Areas and Locations:

The following operations will be available at East Hartford. Buildings indicated in parenthesis refer to East Hartford facilities.

Manufacturing
Overhaul and repair (M-Building)
Development operations (J-Building)

Responsibility:

Calibrate, repair and maintain instrumentation which is used in the process of plasma coating of jet engine parts. Provide electrical and mechanical support.

Responsible for:

Digital transducer/receiver systems that are utilized for the majority of parameters such as:

- Digital readouts
- Digital current readout
- Flow rate readouts
- Temperature readouts
- Computing interfacing

Appendix 7

Ultrasonic and Specialized Inspection

Areas and Locations:

The following operations will be available at East Hartford. Buildings indicated in parenthesis refer to East Hartford facilities.

| | |
|------------------------|-----------------|
| Manufacturing | (B&L-Buildings) |
| Overhaul and repair | (M-Building) |
| Development operations | (K-Building) |

Responsibility:

Repair and calibrate a wide variety of high tech inspection instruments and machines. Provide electrical and mechanic support. Maintain a high degree of accuracy needed in ultrasonic NDT testing.

Responsible for:

Various makers and models for ultrasonic testing systems such as:

Kraut-Kramer-Branson KB6000 test and data acquisition systems

- Cathode ray display
- Pulsar module
- Gate output module
- Receiver module
- Gate module

Nortec measuring system

Nova scope

Sonic mark III system

Branson digital caliper

Apex measuring system with associated PC computer and terminals

Anorad measuring system with associated PC computer and terminals

- | | |
|---------------------------|-------------------|
| • Video display terminals | • Hard copiers |
| • Translators | • Lasers |
| • Interfacing | • Disk drives |
| • Line printers | • Stepper drivers |

Appendix 8

Vacuum Systems

Areas and Locations:

The following operations will be available at East Hartford, Middletown, and North Haven. Buildings indicated in parenthesis refer to East Hartford facilities.

| | |
|------------------------|--------------------------------|
| Manufacturing | (L-Building, Hollow fan blade) |
| Overhaul and repair | (M-Building) |
| Development operations | (J-Building) |

Responsibility:

Calibrate and repair vacuum measuring equipment on electron beam welders and A-bar vacuum heat treating furnaces. Provide electrical and mechanical support. Train operators how to use vacuum leak detectors.

Responsible for:

Many different types of vacuum devices and instruments that are related to vacuum leak detection such as:

- Cold cathode ionization gauges
- Cryogenic refrigerators
- Diffusion vacuum pumps
- Thermocouple vacuum gauges
- Fredericks vacuum measuring systems
- Leybold-Haraeus mass spectrometers
- Varian mass spectrometers
- Veeco mass spectrometers

Appendix 9

Balancers

Areas and Locations:

The following operations will be available at East Hartford and Middletown assembly. Buildings indicated in parenthesis refer to East Hartford facilities.

Overhaul and repair (M-Building)
Development operations (K&J-Buildings)

Responsibility:

Calibrate, repair and maintain Gisholt and Schenck spin balancing systems, which are used to dynamically and statistically test engine rotors. Provide electrical and mechanical support.

Responsible for:

An assortment of electronic measuring devices, electronic modules, computer interfaces, which detect angles and amount of unbalance such as:

- Analog meters
- Digital readouts
- Sensors and pickups
- Motor controls
- Computer interfaces
- Schenck electronic modules
- Gisholt electronic modules

Appendix 10

Holography Inspection

Areas and Locations:

The following operations will be available at East Hartford. Buildings indicated in parenthesis refer to East Hartford facilities.

Manufacturing
Overhaul and repair (M-Building)

Responsibility:

Calibrate, repair and maintain two holography inspection systems. Provide electrical and mechanical support. Train operators in operation of system and computer system.

Responsible for:

The two holography systems incorporate the following:

- Two 135 milliwatt lasers
- Precision optics
 - Beam splitters
 - Optical lenses
 - Mirrors
 - Shutters
 - Spatial Filters
- Hydraulics and pneumatics
 - Air table
 - Clamps (hydraulic)
- Video cameras and monitors
- Still cameras
- PLC controllers
- PC 286 computers
 - Optical disk drives
 - Floppy disk drives
 - Hard disk drives

| |
|---------------------------|
| <i>Appendix 11</i> |
|---------------------------|

Computer Systems Repair

Areas and Locations:

The following operations will be available at East Hartford, Middletown and North Haven. Buildings indicated in parenthesis refer to East Hartford facilities.

| | |
|------------------------|-----------------------|
| Manufacturing | (all areas) |
| Overhaul and repair | (M-Building) |
| Development operations | (J&K-Buildings, Merl) |
| Office buildings | (OBB, OBG) |

Responsibility:

Repair and maintain a wide variety of computer systems.

Responsible for:

Computer manufacturers such as: Hewlett-Packard, Digital Equipment Corp., IBM, and PC compatibles. These systems consist of the following:

- Computer
- Monitor
- Hard disk drives
- Floppy disk drives
- Printers
- Copiers
- Interface circuit cards
- Modems

Appendix 12

Manufacturing Engineering Research Lab

Areas and Locations:

The following operations will be available at East Hartford.

Development operations (Merl)

Responsibility:

Calibrate, repair and maintain computer systems, electronics, pneumatics and temperatures in the drying tunnels for molds of blades and vanes. Provide electrical and mechanical support.

Responsible for:

- Microprocessor-based controllers
- Chart recorders
- Analog meters
- Temperature readouts
- Pneumatic valves
- Water chillers
- Dampers
- Air flow motors

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Appendix 13

Estimate of Existing Salary Structure (P&W)

| Position | Salary in \$ | # of Employees |
|-----------------|---------------------|-----------------------|
|-----------------|---------------------|-----------------------|

| | | |
|-----------------------|---------|----|
| Manager | 125,000 | 1 |
| Assistant Manager | 100,000 | 2 |
| Supervisor | 68,000 | 3 |
| Working Leader | 50,000 | 2 |
| Secretary | 35,000 | 1 |
| Clerk | 28,000 | 1 |
| Electrical Technician | 48,000 | 20 |
| Mechanical Technician | 46,000 | 50 |
| Parts Attendant | 40,000 | 1 |

70 (workers & management) x 5 = 350 employees

Considering 350 employees including management throughout Connecticut (CONNOPS), the approximate salaries would be \$ 28,000,000 /year. Considering \$ 31,200 /year per person as benefits for the 350 employees, we end up with \$ 10,920,000/year.

Total (Salary + Benefits for 350 employees) = \$ 38,920,000

Appendix 14

Estimate of Proposed Salary Structure (MSS)

| Position | Salary in \$ | # of Employees |
|-----------------|---------------------|-----------------------|
| Director | 150,000 | 1 |

| | | |
|----------------------------------|--------------------------|----|
| Managers | 100,000 | 1 |
| Assistant Manager | 75,000 | 1 |
| Supervisor | 60,000 | 1 |
| Assistant Supervisor | 50,000 | 1 |
| Executive Secretary | 35,000 | 1 |
| Clerk | 24,000 | 1 |
| Base Service Technician | max 24,860 min 16,640 | 40 |
| Process Certification Technician | max 33,280 min 24,960 | 10 |
| Technical Repair Technician | max 45,760 min 33,280 | 20 |
| Parts Crib Attendant | max 33,280 min 24,960 | 1 |

Considering 350 employees including management throughout Connecticut (CONNOPS), the approximate salaries for MSS employees would be \$ 13,848,400 /year (calculation were made based on the maximum salary). Considering \$ 31,200 /year per person as benefits for the 350 employees, we end up with \$ 10,920,000/year.

Total (Salary + Benefits for 350 employees) = \$ 24,768,400

Existing (P&W) \$ 38,920,000

Proposed (MSS) 24,768,400

Savings \$ 14,151,600/year 36.5% per year