

# Measurement Technician Training JIP – Phase I Update

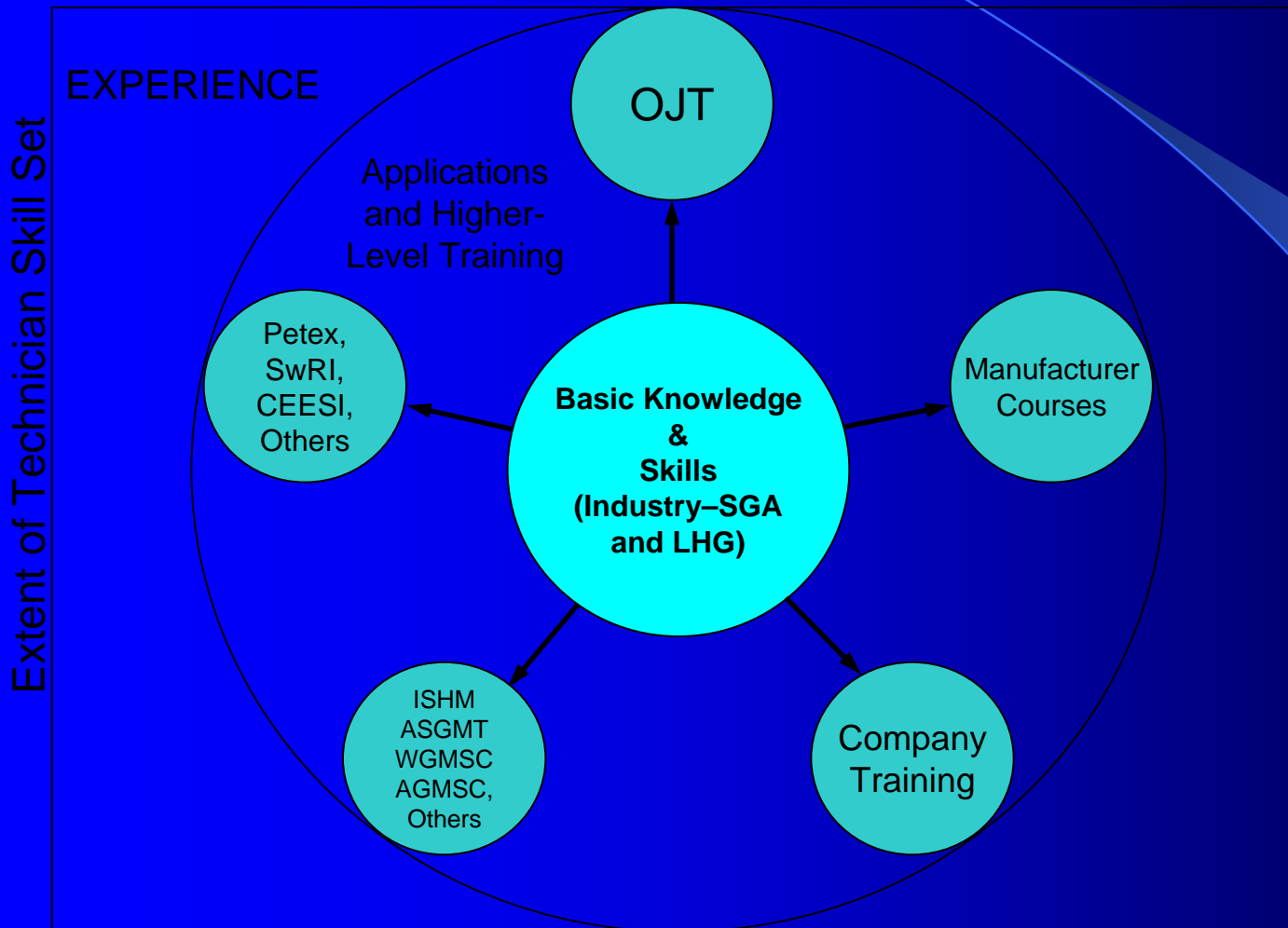
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# Why are we here?

- To pool resources to provide a sustainable measurement technician training program covering basic knowledge and skills.
- Program will be owned and overseen by an industry curriculum committee.
  - Individual company programs have a finite lifetime. This program won't.

# The Concept – The Program as a Foundation



- Provides a foundation.
- Provides a means to coordinate (existing SGA committee structure).

# Phase I Overview

- Task 1: Review and assess pre-existing training material that could contribute to the program.
- Task 2: Develop a curriculum for the program.
- Task 3: Provide a cost estimate for program development.

# Task 1 – Review and Assess Pre-Existing Training Material

- Companies providing material:
  - Anadarko
  - Boardwalk Pipelines
  - El Paso Pipeline Group
  - Northern Natural Gas
  - Southern Union Gas

# Results of Task 1

- Anadarko material can serve as a starting point for CBT development.
  - Gives approximately 10% head start.
- El Paso material provides over 500 hours of instructor-led training.
  - Gives approximately 75% head start.
  - Some EP material suitable for CBT.
- Other materials are useful, but somewhat outdated.
  - Information will be incorporated as needs arise during the life of the program.

# Results of Task 2

- Task breakdown linked to knowledge items.
- Existing course material linked to knowledge items.
  - Some knowledge items not covered by existing material. Will need new material to cover.
- For RFP, curriculum will consist of:
  - 40-50 hours CBT
  - 500-540 hours instructor-led training.
  - 15-20 Skill-Builders

# Results of Task 2

- CBT

- The purpose of the CBT is to impart basic knowledge and to assess a candidate's aptitude for the job.
- Pre-existing CBT will be used for basic math, electronics, etc.
- New CBT will be developed for the measurement-specific subjects.

# Results of Task 2

- Instructor-Led
  - The purpose of the instructor-led courses is to build onto the basic knowledge and expose the student to common tasks.
  - Some short (1-2 hour), simple hands-on activities will be used to maintain interest.
  - El Paso instructor-led courses will be used, with a few updates and one or two new courses designed to cover the knowledge gaps.

# Results of Task 2

- Skill-Builders

- The purpose of the Skill-Builders is to allow the student to demonstrate the ability to accomplish certain common measurement technician tasks.
- The Skill-Builders will consist of 15-20 core tasks.
- Skill-Builders could be accomplished at a flow facility, field location, remote lab or company resource.

# Examples of Company Use

- If the user prefers the task based approach:

Task	Class	Basic Math	Basic Computing	Basic Electronics	Intro to Meas.	Orifice Meters	Turbine Meters	USM	Basic GC	Advanced GC
Service Turbine Meter		x	x	x	x		x			
Change/Inspect Orifice Plates		x	x	x	x	x				
Maintain/Service Ultrasonic Meter		x	x	x	x			x		
Troubleshoot/Repair GC		x	x	x	x				x	x

# Examples of Company Use

- If the user prefers the class-based approach:

Knowledge Provided	Math	Electronics	Computing	Gas Properties	Fluid Mechanics	Industry Standards	Orifice Meters	Turbine Meters	USM	Chromatography
<b>Class</b>										
Basic Math	x	x	x							
Basic Computing			x							
Basic Electronics		x								
Intro. to Meas.	x	x		x	x	x				
Orifice Meters	x			x	x	x	x			
Turbine Meters	x	x		x	x	x		x		
USM	x	x		x	x	x			x	
Basic GC	x	x		x		x				x
Advanced GC	x	x	x	x		x				x

# Task 3 – Progress To Date

- Four Instructional Design Firms (IDF) have been contacted.
- Meetings held with each firm to discuss RFP.
- RFP to be issued by the end of next week.
- IDFs will have 10 business days to respond.

# Task 3 – Progress to Date

- Scope of work for RFP
  - Lead the group through a round of curriculum development, similar to what has been done.
  - Develop 40-50 hours of CBT.
    - Identify existing CBT for basic math, electronics, etc.
  - Revise existing instructor-led course material.
  - Assist with developing Skill-Builders.
  - Provide recommendations for Learning Management System

# Next Steps

- Face-to-face JIP meeting to discuss cost for overall program.
- JIP members should be prepared to commit.
- Formulate general scope for Phase II – Course Development.