

# DACUM Research Chart for Electronics Technician

## DACUM Panel

Steve Danielson  
Educational Development  
Specialist  
Puget Sound Naval Shipyard &  
IMF  
Poulsbo, WA

Stormie Long  
Electronics Mechanic  
IMF Bangor  
Bremerton, WA

Philip Paquette Jr.  
Electrician  
Puget Sound Naval Shipyard  
Manchester, WA

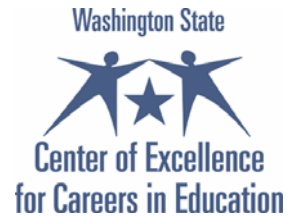
Ronni Wolfe  
Electronics Technician  
NUWC Keyport  
Port Orchard, WA

## DACUM Facilitators

Robert E. Norton  
CETE/OSU

John Moser  
CETE/OSU

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Duties		Tasks			
<b>A</b>	<b>Define Scope of Work</b>	A-1 Review job paperwork	A-2 Implement workload plan	A-3 Conduct system performance tests	A-4 Determine work required (e.g., mechanical, electronic)
		A-11 Conduct safety & environmental analysis	A-12 Coordinate with other trades (e.g., riggers, machinists)	A-13 Determine tools/equipment needed	
<b>B</b>	<b>Perform Electronic Equipment Maintenance</b>	B-1 Gather tools/equipment*	B-2 Contact cognizant personnel (e.g., ship's force, other shops)*	B-3 Conduct visual inspection of equipment*	B-4 Conduct clean & inspect procedure
<b>C</b>	<b>Repair Electronic Equipment</b>	C-1 Recreate documented failure	C-2 Troubleshoot documented failure	C-3 Order replacement parts*	C-4 Repair defective parts C-5 Perform component adjustments
<b>D</b>	<b>Install New Electronic Equipment</b>	D-1 Inventory installation kit	D-2 Coordinate fabrication & installation of equipment foundation(s)		D-3 Install interconnecting cables D-4 Fabricate cable connectors
<b>E</b>	<b>Overhaul Electronic Equipment</b>	E-1 Perform in-depth pre-arrival inspection	E-2 Create overhaul plan	E-3 Remove equipment to be overhauled	E-4 Decontaminate equipment under overhaul E-5 Disassemble equipment under overhaul
<b>F</b>	<b>Participate in Training</b>	F-1 Participate in mandatory training (e.g., EEO, safety, security)	F-2 Provide on-the-job training	F-3 Participate in voluntary career enrichment training	F-4 Participate in mandatory skills training (e.g., soldering, connector repair)
<b>G</b>	<b>Perform Administrative Activities</b>	G-1 Maintain general housekeeping (e.g., workspace, shop)	G-2 Process correspondence (e.g., email, snail mail)		G-3 Develop workload plan (e.g., person hours, schedule)
		G-12 Participate in performance evaluation process	G-13 Perform quality assurance inspections	G-14 Maintain shop technical library (e.g., manuals, diagrams)	

\*Task may be performed in other duties

A-5 Determine if job funds are available	A-6 Determine timeline for job completion	A-7 Determine appropriate job procedures	A-8 Conduct job briefing	A-9 Gather job supporting paperwork (e.g., permissions, procedures)		A-10 Research technical documents (e.g., manuals, drawings)
B-5 Perform preventative maintenance	B-6 Install engineering changes	B-7 Calibrate electronic equipment	B-8 Conduct performance test*	B-9 Document action(s) taken & work completed*		
C-6 Return parts for disposition	C-7 Complete repair of documented failure	C-8 Verify repair was successful				
D-5 Complete equipment installation*	D-6 Conduct power-up test*	D-7 Provide tech support to end users*				
E-6 Facilitate restoration of parts with other shops	E-7 Reassemble equipment under overhaul	E-8 Groom components/wiring				
F-5 Maintain trade certifications	F-6 Participate in trade-specific training (e.g., conferences, schools, seminars)					
G-6 Recommend procedure improvements	G-7 Inventory shop consumables	G-8 Recommend cost-saving improvements	G-9 Generate technical reports	G-10 Conduct information tours of work area	G-11 Participate in community events (e.g., blood drives, tutoring)	

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## General Knowledge and Skills

Analog & digital electronics knowledge  
Military protocol and language  
Electronic schematics, drawings & diagrams  
Electromechanical knowledge  
Hardware/software  
Marine industrial environment  
Communication skills (written, verbal, listening)  
Basic computer skills  
Safety practices  
Data analysis skills  
Problem solving skills  
Multi-tasking skills  
Stress management skills  
Basic soldering skills  
Connector fabrication skills  
Basic mechanical skills  
Time management skills  
Troubleshooting skills  
Teamwork skills  
Training skills

## Tools, Equipment, Supplies and Materials

Soldering iron  
Miscellaneous hand tools  
(screwdrivers, wrenches)  
Oscilloscope  
Digital and analog multimeter  
Megohmmeter  
Signal generator  
Power supply  
Frequency counter  
Vibration generator  
Lead solder  
Alcohol, solvents, and lubricants  
Computer/peripherals  
Reference of Standards  
Personal protective equipment  
Torque wrenches

## Worker Behaviors

High level of integrity	Responsible
Detail-oriented	Mechanically inclined
Self-motivated	Analytical
Personable	Prompt
Sense of humor	Self-disciplined
Dependable	Respectful
Independent	Adaptable
Team player	Tolerant
Safety conscious	Hygienic
Open minded	Proactive

## Future Trends and Concerns

Rapidly changing technology  
Government/military downsizing (bases, budgets)  
Strategic deployment of assets  
Aging workforce  
Loss of expertise  
Disposable electronics  
Government outsourcing