

Operations Support Playbook

Consolidated PDF



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Note: Please check the Playbook on the CE Portal for the most updated version. Updates are communicated through the "Playbook Updates" list on the right hand side of each Playbook.

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Operations Support Overview

Introduction

The purpose of this playbook is to document the business processes under the Operations Flight and to enable the stakeholders and involved role players to understand the process; how it is performed, communicated and resourced; and who is responsible for performing each step within the process.

This playbook documents the current Operations Support section processes; however, these processes will change with the implementation of NexGen IT solution.

Operations Support Playbook Scope

Limitations. This playbook does not replace, supersede, or circumvent existing DoD or Air Force policy.

Applicability. This playbook applies to the Operations Flight, and those charged to monitor or execute the Operations Support business processes. The processes are owned by the Operations Flight (AFCESA/CEO).

Overview – Operations Support

This playbook highlights the processes of the four major areas of work under the Operations Flight. Those four areas include Customer Service, Civil Engineer (CE) Material Acquisition and Supply, CE Operations Planning, and CE Service Contracts.

Major Process Maps and Narratives

This Playbook includes information on several major Operations Support processes:

- Customer Service
 - 1.0 – Work Requests and Approval
 - 2.0 – Work Control and Scheduling
 - 3.0 – Work Closeout and Reporting
 - 4.0 – Facility Management Program
 - 5.0 – Time Accounting
 - 6.0 – CE Command and Control (C2)
- CE Material Acquisition and Supply
 - 7.0 – Vehicle Control Operations (VCO)
 - 8.0 – Self Help Program
 - 9.0 – Material Acquisition
 - 10.0 – Inventory Management
- CE Operations Planning
 - 11.0 – Work Planning
 - 12.0 – Work Clearance Requests
 - 13.0 – Design Review Process
 - 14.0 – Recurring Work Program (RWP) Management
 - 15.0 – Lifecycle Cost Analysis
 - 16.0 – Warranty / Guarantee Program
- CE Service Contracts
 - 17.0 – Big 3 Service Contracts
 - 18.0 – Recurring / Non-Recurring Contracts

Operations Support Major Roles and Responsibilities

The following groups are mainly responsible for completing the Operations Support processes contained in this Playbook:

- Service Call / Production Control
- Material Control

- Work Request Review Board (WRRB)
- Planner

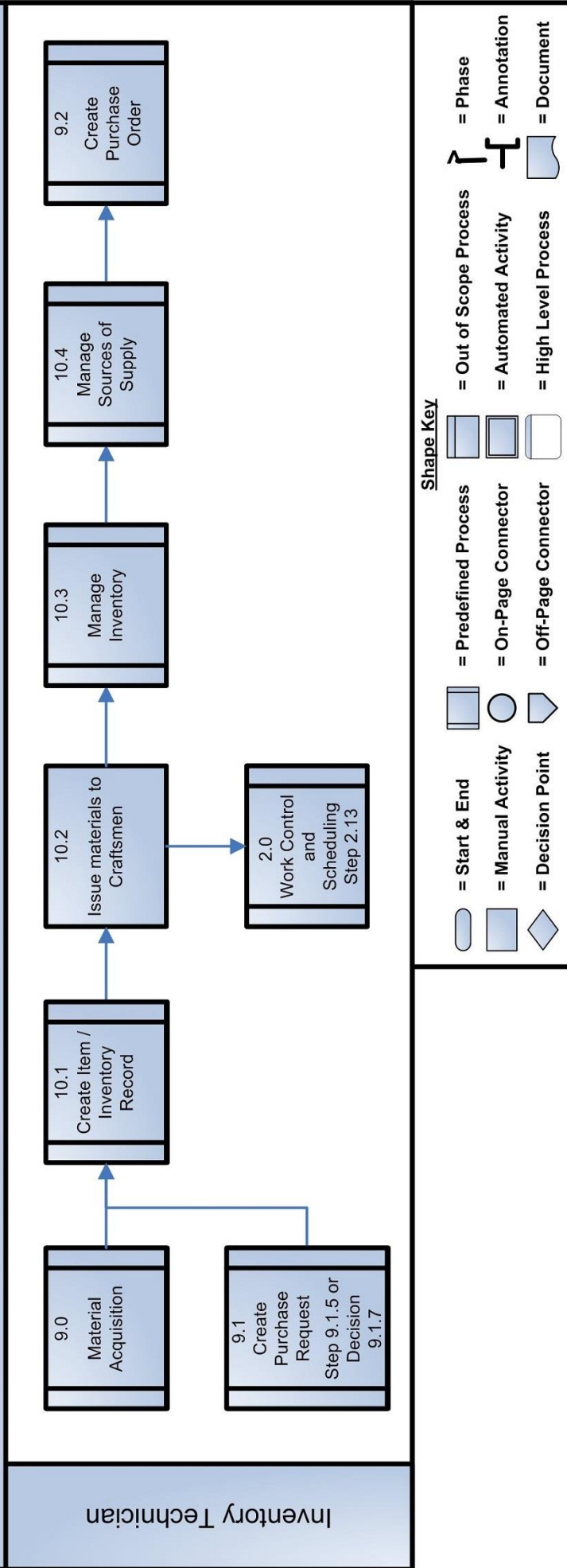
Other Support for Operations Support Processes

The groups listed below provided input into the Operations Support processes but are not directly responsible for completion of the processes:

- Foremen
- Inventory Technician
- Lead Technician
- Unit Commanders
- Facility Manager
- Self Help Store
- Superintendent
- MAJCOM A70
- Quality Assurance Person (QAP)

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Operations Support – 10.0 Inventory Management – Version: 06/16/2010



Operations Support – High Level

This high level step has no narrative, please refer to the map

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Operations Support Comprehensive References

The following is a comprehensive list of references used within Operations Support.

This Playbook is aligned to the following AFIT courses: [WMGT 436 Operations Support](#), and [WMGT 430 Operations Flight Commander's](#).

Strategic Goal Alignment

- [Operations Support Strategic Goal Alignment](#)

Definitions and Acronyms

- [Operations Support Definitions](#)
- [Operations Support Acronyms](#)

Templates

- [AF Form 9 Training document](#)
- [Air Force Template for Facility Managers Training Guide](#)
- [Certificate of Completion](#)
- [Facility Manager's Tri-fold](#)

Policies and Regulations

- [AFFARS MP 5346.103](#)
- [AFH 32-9007](#)
- [AFI 10-2501](#)
- [AFI 23-302](#)
- [AFI 24-301](#)
- [AFI 31-101](#)
- [AFI 32-1001](#)
- [AFI 63-101](#)
- [AFI 64-117](#)
- [AFMAN 10-2507](#)
- [AFMAN 23-110](#)
- [AFOSH 91-46](#)
- [AFOSH 91-501](#)
- [AFPAM 10-219 vol 1](#)
- [AFPAM 10-219 vol 2](#)
- [AFPAM 10-219 vol 3](#)
- [AFPAM 10-219 vol 4](#)
- [AFPAM 32-1004 vol 1](#)
- [AFPAM 32-1004 vol 3](#)
- [AFPAM 32-1004 vol 4](#)
- [AFPAM 32-1004 vol 5](#)
- [AFPAM 32-1004 vol 6](#)
- [AFPAM 32-1006](#)
- [AFPAM 32-1125 vol 1](#)
- [AFSCM 32-202](#)
- [DoDI 5000.02](#)
- [DoDI 5000.02 Enclosure 9](#)
- DoD Regulation 4145. 19-R-1
- [ETL 98-4](#)
- [FAR Part 13, Simplified Acquisition Procedures](#)
- [FAR Part 37, Service Contracting](#)

- [MP 5301.602-3](#)
- [NFPA 10, Standard for Portable Fire Extinguishers](#)
- [NFPA 101, Life Safety Code](#)
- [OMB Circular No. A-123](#)
- OSHA and AFOSH Requirements, as applicable

Forms

- [AF Form 9](#)
- [AF Form 103](#)
- [AF Form 171](#)
- AF Form 327 (WIMS Generated)
- [AF Form 332](#)
- [AF Form 1219](#)
- [AF Form 1445](#)
- [AF Form 1800 series](#)
- [AF Form 1996](#)
- [AF Form 2005](#)
- [AF Form 2293](#)
- [DD Form 1354](#)
- [DD Form 0250](#)
- [DD Form 1149](#)
- [DD Form 1348-1A](#)
- [DD Form 1348-6](#)
- [DD Form 1907](#)
- PCN 365
- [SF 44](#)
- [SF 91](#)
- [SF 361](#)
- [SF 364](#)

File Directories

- N/A

Websites

- [3E6X1 CE Operations Management CoP](#)
- Air Force Civil Engineer Support Agency (AFCESA) web site for contract services
- [Civil Engineering Contracting/Competitive Sourcing CoP](#)
- [Civil Engineer Service Contracting – Competitive Sourcing CoP](#)
- MAJCOM A7O websites for contract services
- [USAF FM CoP](#)

Documents

- [AF Form 1219 Talking Paper](#)
- Air Force Real Property Handbook
- Air Force Sign Standards
- [Annual Self-Review of Facility Manager Duties and Responsibilities](#)
- [Award Purchase Order](#)
- [BCE Self Help Program Handbook](#)
- [CEMAS EOD PCN Listing](#)
- [CEMAS User Guides](#)
- Draft CEMAS CBT
- Embedded IWIMS user guides (PF keys)
- [Facility Abuse Letter](#)
- [Facility Inspections](#)

- [Facility Manager Acceptance of Keys](#)
- Facility Manager's Handbook
- Facility Response Plan (FRP)
- [IMPAC User Guide](#)
- [Lifecycle Cost Analysis](#)
- [Material Acquisition Presentation](#)
- [Material Acquisitions Quick Reference List](#)
- [Material Complete Notification](#)
- [On-Hand Material Transfer Training Document](#)
- [PASS Visual Aid](#)
- [Readiness & Emergency Management Playbook](#)
- [Receiving Training Document](#)
- [Revalidation Questionnaire](#)
- Revalidation Questionnaire Example – FM Updates
- [RWP](#)
- [RWP AF Qualification Training Package](#)
- Self Help Guide
- [SBSS Interface](#)
- [SPEED Visual Aid](#)
- [Store Maintenance Reorder](#)

Systems (if applicable)

- [ACES-RP](#)
- ADLS, AF Facility Manager Training (To Be Developed)
- CEMAS
- GPC
- IWIMS
- PACES
- PrimeVendor
- RS Means

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Operations Support Acronyms

A

ACES-RP	Automated Civil Engineer System – Real Property
ADCON	Administrative Control
ADLS	Advanced Distributed Learning System
AFI	Air Force Instruction
AFCESA	Air Force Civil Engineer Support Agency
AFIMS	Air Force Incident Management System
AFMAN	Air Force Manual
AFPAM	Air Force Pamphlet
AFOSH	Air Force Office of Safety and Health
AFSC	Air Force Specialty Code
AMP	Activity Management Plan

B

BCE	Base Civil Engineer
BOM	Bill of Materials
BPA	Blanket Purchase Agreement

C

C2	Command and Control
CBRN	Chemical, Biological, Radiological and Nuclear
CBRNE	Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives
CBT	Computer Based Training
CEA	Civil Engineer Asset Management
CEMAS	Civil Engineering Materiel Acquisition System
CEP	Civil Engineer Programs
CEO	Civil Engineer Operations
CEOS	Civil Engineer Operations Support
CES/CC	Civil Engineer Squadron Commander
CGO	Company Grade Officer
CLINS	Contract Line Item
CMA	Chief of Material Acquisition
CO	Contracting Officer
COCESS	Contractor-Operated Civil Engineer Supply Stores
CoP	Community of Practice
CPAR	Contractor Performance Assessment Report
CSL	Consolidated Stock Listing

D

DEROS	Date Eligible for Return From Overseas
DOL	Department of Labor
DSC	Distribution Section Chief

DSS	Distribution Section Superintendent
DSW	Direct Scheduled Work

E

EDD	Estimated Delivery Date
EMCS	Energy Management Control System
EOC	Emergency Operations Center
ESF	Emergency Support Function
ES-S	Enterprise Solution – Supply

F

FAR	Federal Acquisition Regulation
FC/FD	Functional Commander/Functional Director
FES	Fire Emergency Services
FFP	Firm Fixed Price
FRP	Facility Response Plan
FSS	Federal Supply Schedule
FY	Fiscal Year

G

G&A	General and Administrative
GOCESS	Government-Operated Civil Engineer Supply Stores
GPC	Government Purchase Card

H

HAF	Headquarters Air Force
HAZCOM	Hazard Communication
HAZMAT	Hazardous Material
HMMP	Hazardous Materials Management Process
HVAC	Heating, Ventilating, Air Conditioning, and Controls
H&W	Health and Welfare

I

IAW	In Accordance With
IC	Incident Commander
IDIQ	Indefinite Delivery, Indefinite Quantity
IGE	Independent Government Estimate
ILS-S	Integrated Logistics Supply System
IWIMS	Interim Work Information Management System
IWP	In-service Work Plan

J

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K

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L

LOS	Line of Service
LRS	Logistics Readiness Squadron
LUC	Labor Utilization Code

M

MAJCOM	Major Command
MAS	Maintenance Action Sheet
MEET	Mission Essential Equipment Training
MEL	Minimum Essential Vehicle Level
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding

N

NCO	Non-Commissioned Officer
NCOIC	Non-Commissioned Officers in Charge

O

O&M	Operations and Maintenance
OI	Operating Instructions
OMB	Office of Management and Budget
OPR	Office of Primary Responsibility
OSHA	Occupational Safety & Health Administration

P

PACES	Parametric Cost Engineering System
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PBSA	Performance Based Services Acquisition
PO	Purchase Order
POC	Point of Contact
PR	Purchase Request
Prime BEEF	Prime Base Engineer Emergency Force
PT	Physical Training
PWS	Performance Work Statement

Q

QA	Quality Assurance
QAE	Quality Assurance Evaluator
QAP	Quality Assurance Person
QAPC	Quality Assurance Program Coordinator

R

RWP	Recurring Work Program
RDD	Revised Delivery Date
RPIE	Real Property Installed Equipment
ROI	Return on Investment

S

SBSS	Standard Base Supply System
SCADA	Supervisory Control and Data Acquisition
SME	Subject Matter Expert
SOW	Statement of Work
SRM	Sustainment, Restoration, and Modernization
SS	Services Summary

T

TDY	Temporary Duty
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U

UCC	Unit Control Center
UMD	Unit Manning Document

V

VCO	Vehicle Control Operations
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VFM	Vehicle Fleet Manager
VMS	Vehicle Management Superintendent

W

WAWF	Wide Area Work Flow
WO	Work Order
WRRB	Work Request Review Board

X

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Y

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Z

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Operations Support Definitions

1219 Visit	The periodic facility visit performed by a zone to identify routine work requirements and schedule a follow on repair visit by the work center crafts. Known as the 1219 visit due to the use of the AF Form 1219, Base Civil Engineer (BCE) Multi Craft Job Order.
Base Civil Engineer (BCE) - Senior	Ranking base engineer in the Civil Engineer unit.
Blanket Purchase Agreement (BPA)	A simplified method of filling anticipated repetitive needs for small quantities of supplies. This agreement is designed to reduce administrative costs in making small purchases by eliminating the need for issuing individual purchase documents. The government is obligated only when a call is placed against it.
BPA Call	An action initiated by a Civil Engineer Material Acquisition System (CEMAS) buyer or an authorized individual to order supplies from firms that have been awarded a blanket purchase agreement.
CEMAS Store Work Order	A special collection work order (usually work order 00011) with shop code, cost center, cost account code, and EEIC agreed upon to be used to collect the cost of material purchased and maintained in the store.
CEMAS Monitor	The chief of Material Acquisition or designated representative who will interface between Base Contracting, Base Supply, and Accounting and Finance.
CEMAS Stocked Items	Items identified or approved by the chief of Material Acquisition to be stocked for recurring demands. Approval is based on demand history, funding availability, and storage limitation.
CEMAS Stock List (CSL)	A unique number assigned to individual items listed in the noun dictionary.
Certificate of Necessity	A written statement, signed by Deputy Assistant Secretary of the Air Force for Installation (SAF/MII), which certifies it is necessary (for reasons vital to the national security) for the Air Force to exceed the statutory cost limits established in AFI 329001 relative to annual rent or alterations, improvements, and repairs to leased buildings.
Core Requirements	Process oriented descriptions which describe the tasks needed to support Maintenance Engineering.
Direct Scheduled Work Order	Emergency or essential work generally not requiring detailed planning, also known as job orders.
Direct Digital Control	Any control system (HVAC, alarms, lighting, or otherwise) using entirely solid state (digital) components.
District Engineer	One of the several Division Engineers, US Army Corps of Engineers, who supervise the activities of certain District Engineers and are the intervening management level between the Chief of Engineers and District Engineers (e.g., US Army Engineer Division, North Atlantic, CENAD).
Emergency Work	Work that must be accomplished immediately.
Energy Management Control System (EMCS)	The civil engineer energy control system that historically manages heating, ventilation, and air conditioning (HVAC) systems. It differs from direct digital control in that it includes both solid state systems and the older pneumatic systems engineers. Any engineer in Civil Engineer units to include the Base Civil Engineer, the Maintenance Engineer, program engineers, and project engineers.
Essential Work	Work that cannot wait for the next 1219 visit.

Functional Squadron	Pre-1992 squadron structure, functionally oriented, it collocated like functions and distribution portions of the missions and objectives to these functional shops.
GSA Reimbursables	These are special services, beyond the standard levels of service normally provided by GSA, for which the Air Force must reimburse GSA.
Lifecycle Cost	Primary criteria to be used for design (mandated by the Department of Defense); criteria of analyzing the cost over the life span of a component or system to ensure all costs are used (purchase prices, construction costs, maintainability, efficiency, reliability, etc.).
Lifecycle Cost Analysis	Lifecycle Cost Analysis is a data-driven approach to ensure that all bases are operating at consistent and strong level. It identifies where money is currently being spent and provides statistical backing for requests for additional spending. The term Lifecycle Cost Analysis as applied for this playbook extends to solutions and improvements for not only Recurring Work Program (RWP) management, but also for data/programs managed out of Programs and Asset Management Flights, respectively.
Non-MRL Items	Items not included in an established material requirements list (MRL). Most Contractor Operated Civil Engineer Supply Store (COCESS) contracts require the item be added to the MRL before the contractor provides the item.
Non Pre-Priced Items (NPI)	An item obtained for Air Force use by a COCESS contractor for which there was no prior solicited and agreed costs.
Noun Dictionary	An item record list which includes item description, pricing history, demand data, and inventory data for each item loaded in CEMAS.
Operations Specialists	The Air Force specialty created to support the scheduling and controlling of the Civil Engineer work forces; also known as work force manager, controller, triple nickel, production controller, and scheduler.
Preventative Maintenance	Recurring work performed to safeguard and/or extend the efficient and effective lifespan of real property, RPIE, or other equipment items.
Purchase Order	A document authorizing a vendor to deliver BCE materials.
Recurring Work	Routine, redundant, recurring work involving real property, real property installed equipment (RPIE), or systems and other equipment maintained by CE; scope and frequency is well known, locations are well established, materials are available or not required.
Service Contract	A contract for non-personal services, executed under the Armed Services Procurement Act of 1947, where the contracting party agrees to perform some service for the Air Force and the Air Force agrees to pay for such service. In performing the service, the contractor may use real property in which he or she has an interest, even to the extent of permitting the Air Force to go on the property in a nonexclusive manner.
Stock Record Account Number (SRAN)	BCE stock record account number (SRAN) are at each base. An accountable stock record account is established for the Civil Engineer Material Acquisition Systems (CEMAS). The four-digit SRAN assigned to the local base supply FB/FE account also applies to the FC account, i.e. FC4800. New stock record account numbers are requested through MAJCOM from HQ AFMC/LGSW.
Work Orders	Work requiring detailed planning or capitalization of the real property records.

Source: AFI 32-1001; AFPAM 32-1004, volume 2-4

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Operations Support Strategic Goals

Operations Support supports Civil Engineering Goal 3, Objective 3.7.

CE Goal 3: Develop sustainable installations by implementing asset management principles for built and natural assets

Air Force Civil Engineering is actively responding to the Secretary of the Air Force's mandate to "...streamline infrastructure assets while optimizing operational capability" and maintain compliance with federal asset management, energy, and sustainability directives. We must meet these challenging goals in a way that simultaneously improves warfighter support and reduces infrastructure costs. We will accomplish this by implementing asset management principles for built and natural assets, reducing our physical plant, improving our infrastructure energy programs, and integrating sustainability into our planning and daily operations to more efficiently manage our physical plant throughout its lifecycle.

Objective 3.7: Transform work and supply management to achieve cost reductions and organizational efficiencies

We will continually learn and apply best practices from within the Air Force, our sister services, and our private sector strategic partners that face similar operations and logistics challenges. We will standardize business processes utilizing automation and IT to reduce costs and better utilize personnel's valuable time. We will leverage the Air Force's significant purchasing power through strategic sourcing, critically analyzing our procurements and making strategic business decisions about acquiring commodities and services more effectively through commodities councils and other strategic sourcing arrangements.

3.7A: Streamline the work order requirements process by implementing more effective, efficient, and responsive methods of identifying, prioritizing, and executing work order requirements

3.7B: Implement processes that will improve requirements identification, inventory visibility, order tracking, material handling, accountability, and reporting in support of facility maintenance

3.7D: Evaluate options and implement approved methods for leveraging the Air Force's size and purchasing power, including strategic sourcing and bundling of municipal-type services (custodial, refuse, grounds maintenance)

Source: 2009-2013 USAF CE Strategic Plan

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Operations Support – 1.0 Work Requests and Approval

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer	• Identify Problem • Submit Work
Service Call / Production Control	• Receive and review work request • Determine whether work is executable in CE • Closeout non-CE work order in system • Determine whether request is for an emergency • Determine whether planning is needed • Receive system generated work • Identify whether work is for preventative maintenance

Narrative

Process 1.0 – Work Requests and Approvals

Estimated Completion Time: 4-6 weeks; On-going

Service Call / Production Control is the focal point for receipt, processing, and cradle to grave tracking of all Base Civil Engineer (BCE) work requests. Customers, such as facility managers, call in work requests and it is up to Service Call / Production Control to determine the priority of work, whether it is a BCE responsibility, if the requirement should be submitted on an AF Form 332, if coordination with an external agency is required prior to approval, if it is generated or recurring work, and whether it will be automatically handled on a set scheduled and routine basis.

Prior to submitting a 332, requestors must coordinate with the appropriate agencies on work that requires CE action to eliminate or correct hazards. This coordination is critical to ensure compliance with prescribed building, safety, and environmental policies, regulations and criteria. Civil Engineers are only authorized to accept work requests for Real Property Installed Equipment. This requirement is not required for Direct Scheduled Work (DSW). This determination can be made by the Customer Service Section or the customer if adequately trained on the difference between a DSW and a Work Order.

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.22.](#)

[Entry from Process 4.0 Facility Management Program.](#)

[Entry from Process 11.0 Work Planning, Decision 11.5.](#)

[Entry from Process 15.0 Lifecycle Cost Analysis, Decision 15.4.](#)

[Entry from Process 15.0 Lifecycle Cost Analysis, Step 15.8.](#)

[Entry from Process 16.0 Warranty / Guarantee Program, Decision 16.5.](#)

[Entry from Process 16.0 Warranty / Guarantee Program, Decision 16.8.](#)

Step 1.1 – Identify problem

Role: Customer

Estimated Completion Time: 1-2 days

There are several methods customers can use to identify work to CE. They can call Service Call / Production Control if the work is an emergency, urgent, or a routine, direct scheduled requirement. They can also call Service Call / Production Control if the work is routine but not so significant that it requires the submission of a 332. A job is considered an emergency if there is an interruption of utilities, immediate danger to human life, mission impact, or possibility of damage to the facility's infrastructure. A job is considered urgent if there is a non-emergency condition, including, but not limited to, a stopped-up toilet when others are available, no heat in a single room, or air conditioning

inoperative in a single room. In the event of an emergency, the customer only has to call in to CE. However, if it is routine/urgent work, then the customer must submit a work request (AF Form 332) or add it to the AF Form 1219 BCE Multi-Craft Job order to CE for the review and approval process.

[Proceed to Step 1.2.](#)

Step 1.2 – Submit work

Role: Customer

Estimated Completion Time: 1-2 days

Customer requirements are received either verbally or in writing by Service Call / Production Control.

[Proceed to Step 1.3.](#)

Step 1.3 – Receive and review work request

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control receive and review the work request. Work orders go through a basic evaluation process upon receipt: (1) Is this what they want?; (2) Is this work consistent with long range plans?; (3) Is it redundant?; (4) How should the work be executed?; and (5) Approve/disapprove?

[Proceed to Decision 1.4.](#)

Decision 1.4 – Executable CE work?

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control determines whether the work request is for executable CE work. This decision includes verifying that no duplicate work orders exist and that work is not outside of the Memorandum of Agreement (MOA) / Memorandum of Understanding (MOU). Validity is defined as a work order that is within the scope of CE or CE contractors to complete.

[If 'Yes', proceed to Decision 1.6.](#)

[If 'No', proceed to Step 1.5.](#)

Step 1.5 – Closeout non-CE work order in system

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control closes out the non-CE work order and notifies the customer.

End.

Decision 1.6 – Emergency?

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control determines if there is an emergency by reviewing the work description. If an emergency exists, personnel must be dispatched immediately. After 5PM, Service Call / Production Control should evaluate the significance of the emergency so that unnecessary manpower is not used. If it is determined that the emergency does not present an imminent threat to safety, facility damage, etc, Service Call / Production Control will downgrade the work request and provide an initial assessment of whether or not planning is necessary. Definitions and examples of emergencies can be found in Chapter 3 of AFI 32-1001 and AFPAM 32-1004, Volume 3.

[If 'Yes', proceed to Process 2.0 Work Control and Scheduling.](#)
[If 'No', proceed to Decision 1.7.](#)

Decision 1.7 – Planning?

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control reviews the work description to determine if the work requires planning based on magnitude, complexity, cost, and/or duration of a request. If planning is not necessary, the work order moves to Work Control and Scheduling as Direct Scheduled Work. If planning is required, Service Call / Production Control would need to coordinate and track the request to the operate function.

[If 'Yes', proceed to Process 11.0 Work Planning.](#)
[If 'No', proceed to Process 2.0 Work Control and Scheduling.](#)

Step 1.8 – Receive system generated work

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

Service Call / Production Control receives system generated work through a weekly report. The system checks facilities and releases a notice that work must be done on a particular piece of equipment (e.g., overflow in a water tank). Possible inputs come from Energy Management Control System (EMCS), Recurring Work Program (RWP), or Supervisory Control and Data Acquisition (SCADA). However, none of these systems currently interface with the Automated Civil Engineer System (ACES) / Interim Work Information Management System (IWIMS) and must be manually reported by the system manager.

[Proceed to Decision 1.9.](#)

Decision 1.9 – Preventative maintenance work?

Role: Service Call / Production Control

Estimated Completion Time: 1-2 days

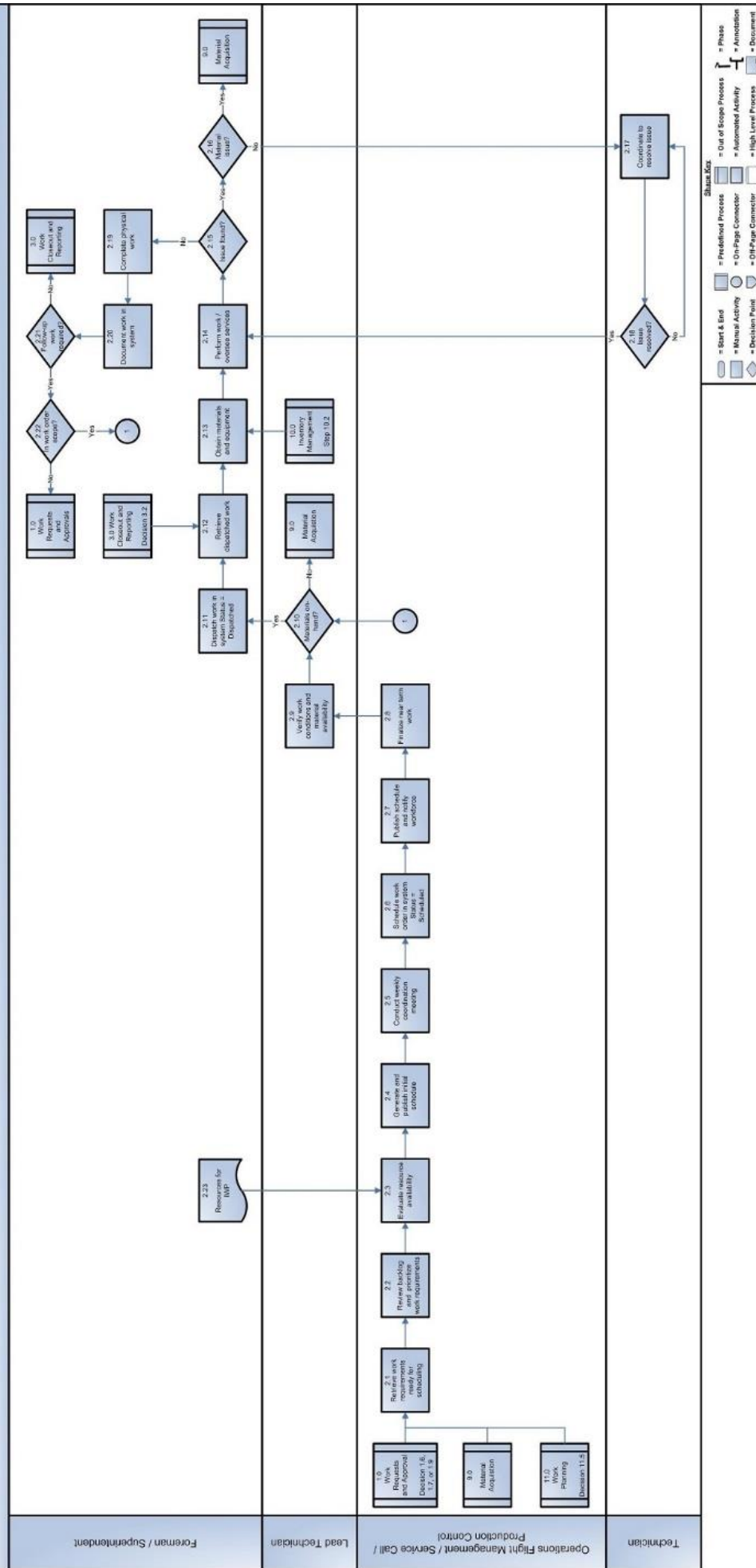
Service Call / Production Control determines if the work order is based off a meter / time reading (i.e., system generated EMCS / SCADA notification), in which case required, or a safety / emergency issue, in which case preventative maintenance work is not required.

[If 'Yes', proceed to Process 2.0 Work Control and Scheduling.](#)
[If 'No', proceed to Decision 1.6.](#)

Advice and Tips

- Some installations allow Facility Managers to submit 332s to CE without coordination because CE obtains all the necessary coordination and/or it's done online using the CE TOOLS PORTAL.
- Service call personnel should provide the prerequisites to a customer if they intend to submit a 332. Often times a customer will call, determine they need to go the 332 route, and show up with an incomplete form.
- After hours work, Service Call personnel are not skilled in the trades. If there is any doubt a request may or may not represent significant safety / cause facility damage - call Standby personnel out to investigate.

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Operations Support – 2.0 Work Control and Scheduling

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Foreman / Superintendent	• Dispatch work in system (Status = Dispatched) • Retrieve dispatched work • Obtain materials and equipment • Perform work / oversee services • Determine whether an issue exists • Determine whether the issue is a material issue • Complete physical work • Document work in system • Determine whether follow-up work is required • Determine whether work is in the scope of the work order
Lead Technician	• Verify work conditions and material availability • Determine whether materials are on-hand
Operations Management/ Service Call / Production Control	• Retrieve work requirements ready for scheduling • Review backlog and prioritize work requirements • Evaluate resource availability • Generate and publish initial schedule • Conduct weekly coordination meetings • Schedule work order in system (Status = Scheduled) • Publish approved schedule and notify workforce • Finalize near term work
Technician	• Coordinate to resolve issue • Determine whether the issue is resolved

Narrative

Process 2.0 – Work Control and Scheduling

Estimated Completion Time: 4-6 Weeks

Work Control and Scheduling involves identifying work to be done and the resources needed to do it. In CE, scheduling is an operation consisting of monthly, weekly, and daily work planning. An in-service work plan is used to time-phase work requirements. Weekly and daily schedules are used to direct and measure manpower utilization. They also add structure and organization to the large and formidable task of maintaining an Air Force base.

In this playbook, Operations Flight Management includes:

- Foreman
- Superintendents
- Deputy Chief Operations
- Chief, Operations Flight
- In-service Work Plan (IWP) Programmer

[Entry from Process 1.0 Work Requests and Approval, Decision 1.6.](#)

[Entry from Process 1.0 Work Requests and Approval, Decision 1.7.](#)

[Entry from Process 1.0 Work Requests and Approval, Decision 1.9.](#)

[Entry from Process 9.0 Material Acquisition.](#)

[Entry from Process 11.0 Work Planning, Decision 11.5.](#)

Step 2.1 – Retrieve work requirements ready for scheduling

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1 day

Operations Flight Management / Service Call / Production Control retrieve the work requirements ready for scheduling.

[Proceed to Step 2.2.](#)

Step 2.2 – Review backlog and prioritize work requirements

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1-2 days

Operations Flight Management / Service Call / Production Control review the backlog and prioritize the work requirements. Prioritization is based on criticality of work, duration of work, and operational impact of not completing the work. It also depends on execution time and man hours. Decisions are made best based on need and availability.

[Proceed to Step 2.3.](#)

Step 2.3 – Evaluate resource availability

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1 day

Operations Flight Management / Service Call / Production Control evaluate resource availability, including funding and manpower. Resources for IWP are used in this evaluation. This includes weekly schedules and availability. Chapter 5 of AFPAM 32-1125 vol1 provides additional information related to IWP.

[Proceed to Step 2.4.](#)

Step 2.4 – Generate and publish initial schedule

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1-2 days

Operations Flight Management / Service Call / Production Control generate and publish the initial schedule.

[Proceed to Step 2.5.](#)

Step 2.5 – Conduct weekly coordination meeting

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1 day

Operations Flight Management / Service Call / Production Control conduct the weekly schedulers meeting. Some possible topics to discuss at this meeting include status of current projects, start dates for upcoming projects, problems with projects, reduced funding lines, and manpower issues. You can also discuss anything else that is needed to develop or that affects the schedule for the upcoming week such as out-of-cycle deployments, inspections and emergency leave.

[Proceed to Step 2.6.](#)

Step 2.6 – Schedule work order in system (Status = Scheduled)

Role: Operations Flight Management / Service Call / Production Control
Estimated Completion Time: 1 day

Operations Flight Management / Service Call / Production Control schedule the work order in the system.

[Proceed to Step 2.7.](#)

Step 2.7 – Publish approved schedule and notify workforce**Role: Operations Flight Management / Service Call / Production Control****Estimated Completion Time: 1 day**

Operations Flight Management / Service Call / Production Control publish the approved schedule and notify the workforce.

[Proceed to Step 2.8.](#)

Step 2.8 – Finalize near term work**Role: Operations Flight Management / Service Call / Production Control****Estimated Completion Time: 1-2 days**

Operations Flight Management / Service Call / Production Control finalize the near term work schedule based on current workforce capacity changes or other priorities.

[Proceed to Step 2.9.](#)

Step 2.9 – Verify work conditions and material availability**Role: Lead Technician****Estimated Completion Time: 1 day**

The Lead Technician verifies the work conditions, material availability, and equipment availability for the work order. These include materials, vendor services, safety requirements, security issues, and equipment availability. During this step, the Lead Technician may coordinate with the customer.

[Proceed to Decision 2.10.](#)

Decision 2.10 – Materials on-hand?**Role: Lead Technician****Estimated Completion Time: 1 day**

The Lead Technician determines whether the materials needed are available on-hand for the work order. If materials are not on-hand, the process continues on to Material Acquisition.

[If 'Yes', proceed to Step 2.11.](#)

[If 'No', proceed to Process 9.0 Material Acquisition.](#)

Step 2.11 – Dispatch work in system (Status = Dispatched)**Role: Foreman / Superintendent****Estimated Completion Time: 1 day**

The Foreman / Superintendent dispatch the work in the system.

[Proceed to Step 2.12.](#)

Step 2.12 – Retrieve dispatched work**Role: Foreman / Superintendent****Estimated Completion Time: 1 day**

[Entry from Process 3.0 Work Closeout and Reporting, Decision 3.2.](#)

The Foreman / Superintendent retrieve the dispatched work.

[Proceed to Step 2.13.](#)

Step 2.13 – Obtain materials and equipment

Role: Foreman / Superintendent

Estimated Completion Time: 1 day

[Entry from Process 10.0 Inventory Management, Step 10.2.](#)

The Foreman / Superintendent obtain the necessary materials and equipment.

[Proceed to Step 2.14.](#)

Step 2.14 – Perform work / oversee services

Role: Foreman / Superintendent

Estimated Completion Time: 2-4 weeks

The Foreman / Superintendent perform the work or oversee the services.

[Proceed to Decision 2.15.](#)

Decision 2.15 – Issue found?

Role: Foreman / Superintendent

Estimated Completion Time: 1 day

The Foreman / Superintendent determine whether an issue exists with the work order that prohibits the successful completion of the work.

[If 'Yes', proceed to Decision 2.16.](#)

[If 'No', proceed to Step 2.19.](#)

Decision 2.16 – Material issue?

Role: Foreman / Superintendent

Estimated Completion Time: 1 day

The Foreman / Superintendent determine whether the issue is a material issue.

[If 'Yes', proceed to Process 9.0 Material Acquisition.](#)

[If 'No', proceed to Step 2.17.](#)

Step 2.17 – Coordinate to resolve issue

Role: Technician

Estimated Completion Time: 1 day

The Technician coordinates with the necessary entities to resolve the issue in order to complete the work order.

[Proceed to Decision 2.18.](#)

Decision 2.18 – Issue resolved?

Role: Technician

Estimated Completion Time: 1 day

The Foreman / Superintendent determine whether the issue is a material issue.

[If 'Yes', proceed to Step 2.14.](#)
[If 'No', proceed to Step 2.17.](#)

Step 2.19 – Complete physical work
Role: Foreman / Superintendent
Estimated Completion Time: 1-2 weeks

The Foreman / Superintendent complete the physical work.

[Proceed to Step 2.20.](#)

Step 2.20 – Document work in system
Role: Foreman / Superintendent
Estimated Completion Time: 1 day

The Foreman / Superintendent document the work in the system as applicable for the tasks completed for the work order. Labor hours, material usage, and tool usage are all documented.

[Proceed to Decision 2.21.](#)

Decision 2.21 – Follow-up work required?
Role: Foreman / Superintendent
Estimated Completion Time: 1 day

The Foreman / Superintendent determine whether follow-up work is required. If follow-up work is required, you have to identify the work but also close the current ticket. Regardless of whether you identify follow-up work, you must close the ticket.

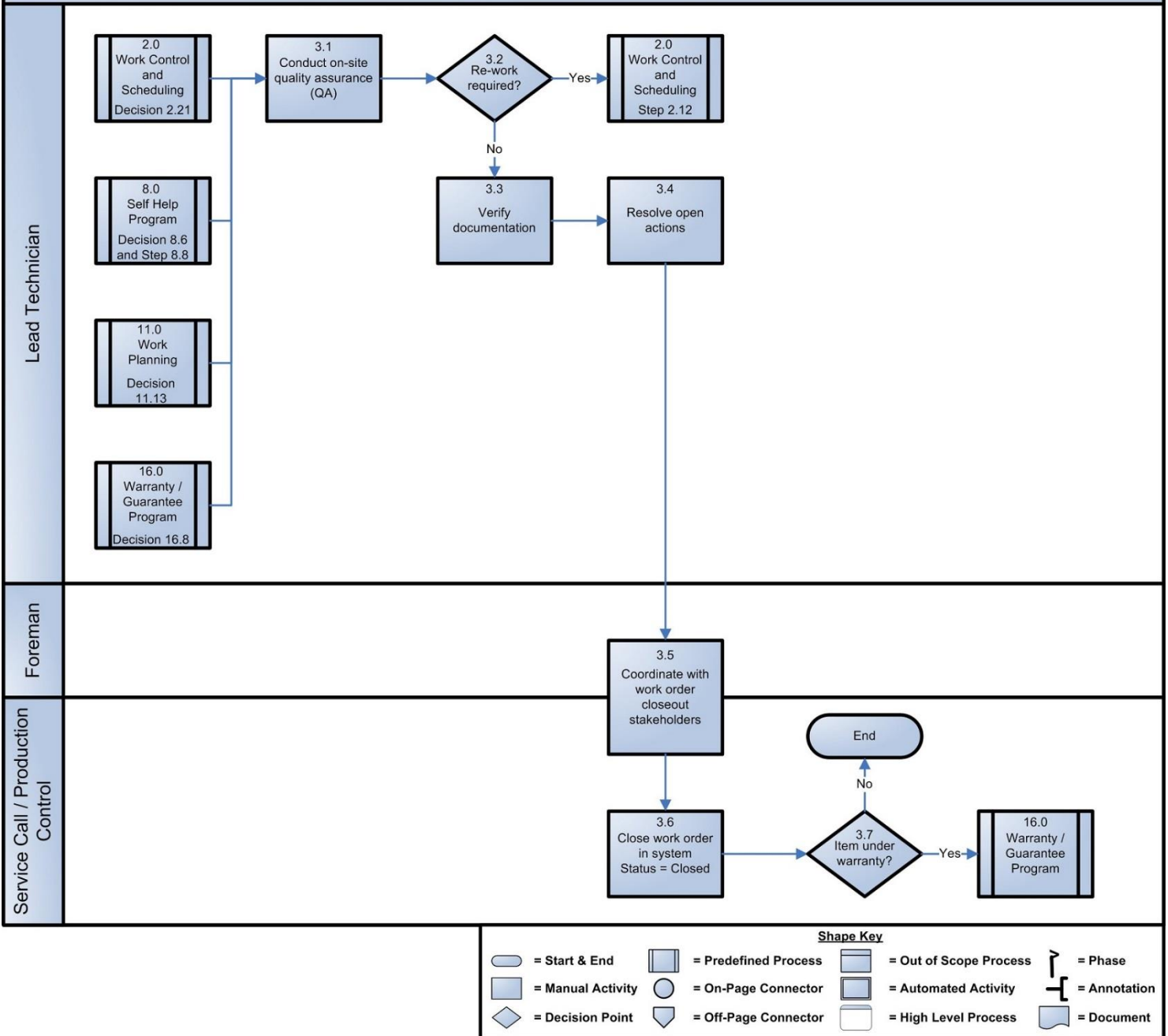
[If 'Yes', proceed to Decision 2.22.](#)
[If 'No', proceed to Process 3.0 Work Closeout and Reporting.](#)

Decision 2.22 – In work order scope?
Role: Foreman / Superintendent
Estimated Completion Time: 1 day

The Foreman / Superintendent determine whether the follow-up work is within the scope of the existing work order.

[If 'Yes', proceed to Decision 2.10.](#)
[If 'No', proceed to Process 1.0 Work Requests and Approval.](#)

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Operations Support – 3.0 Work Closeout and Reporting

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Lead Technician	• Conduct on-site QA • Determine if re-work is required • Verify documentation • Resolve open action items
Foreman	• Coordinate with work order closeout stakeholders
Service Call / Production Control	• Coordinate with work order closeout stakeholders • Close work order in system

Narrative

Process 3.0 – Work Closeout and Reporting

Estimated Completion Time: 1-2 days

For Civil Engineering (CE), a work order is not complete simply when the customer's requirement has been satisfied. There are administrative, accounting, and reporting actions that must be finalized before the requirement can truly be considered complete. The Lead Technician and Service Call / Production Control work together to ensure work is inspected for quality, labor and material accounting is verified, preventive maintenance plans or Recurring Work Program (RWP) are updated, and real property records and facility drawings are updated. Personnel should pay particular attention to reimbursable work to ensure CE is reimbursed from those reimbursable customers as written / identified in current Memorandum of Understanding (MOU) / Memorandum of Agreement (MOA).

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.21.](#)

[Entry from Process 8.0 Self Help Program, Decision 8.6.](#)

[Entry from Process 8.0, Self Help Program Step 8.8.](#)

[Entry from Process 11.0 Work Planning Decision 11.3.](#)

[Entry from Process 16.0 Warranty / Guarantee Program, Decision 16.8.](#)

Step 3.1 – Conduct on-site quality assurance (QA)

Role: Lead Technician

Estimated Completion Time: 1-2 days

The Lead Technician conducts on-site quality assurance of completed work. The quality assurance is performed with the customer to ensure physical work was completed correctly, work was in accordance with the work order, complies with code, and no outstanding safety issues exist.

[Proceed to Decision 3.2.](#)

Decision 3.2 – Re-work required?

Role: Lead Technician

Estimated Completion Time: 1-5 days

The Lead Technician determines whether re-work is required as a result of the QA. Chapter 6 of AFI 32-1001 provides guidance to determine whether re-work is required.

[If 'Yes', proceed to Process 2.0 Work Control and Scheduling, Step 2.12.](#)
[If 'No', proceed to Step 3.3.](#)

Step 3.3 – Verify documentation

Role: Lead Technician

Estimated Completion Time: 1 day

The Lead Technician verifies the AF Form 327 and all supporting documents such as drawings, sketches and information needed to update as-built drawings or Recurring Work Program (RWP) records are inside the work order package.

[Proceed to Step 3.4.](#)

Step 3.4 – Resolve open actions

Role: Lead Technician

Estimated Completion Time: 1 day

The Lead Technician resolves open action items related to the physical work outside the scope of the original work order by calling in a routine work order to Service Call / Production Control or if it's a new item, advising the customer to submit an AF Form 332.

[Proceed to Step 3.5.](#)

Step 3.5 – Coordinate with work order closeout stakeholders

Role: Foreman, Service Call / Production Control

Estimated Completion Time: 5-7 days

The Foreman and Service Call / Production Control coordinate with work order closeout stakeholders. Stakeholders include:

- Lead Technician making sure that excess or residue material and equipment are cleaned, inventoried, and labeled with DD Form 1574, Serviceable Tag.
- Scheduler ensures all the labor, material, and equipment actions that influence the cost of the work order or real property record have been reported, including entering the actual costs of installing non-Air Force excess material or equipment. Variances of greater than 20% must be justified.
- On receipt of the final Bill of Material closeout, the Scheduler gets the signature of the chief of operations or a designated representative on the original AF Form 327 in the final certification block, and runs the final closeout report.
- Work order folder is sent to real estate management if a change to the real property records or record drawings is indicated, and forwards the package for possible voucher number and action.
- Once received back from real estate, package is forwarded to the Programs Flight drafting section when as-built drawing updates are required.
- After all actions are completed, the folder is returned to Service Call / Production Control for final disposition and placed.

[Proceed to Step 3.6.](#)

Step 3.6 – Close work order in system (Status = Closed)

Role: Service Call / Production Control

Estimated Completion Time: 1 day

Service Call / Production Control closes the work order in the system (status is set to closed). This includes the feedback form. Change Orders (new work) should be identified during step 3.4. New work identified after step 3.4 should be processed in accordance with 1.0 Work Requests and Approval.

[Proceed to Decision 3.7.](#)

Decision 3.7 – Item under warranty?
Role: Service Call / Production Control
Estimated Completion Time: 1 day

Service Call / Production Control identifies whether the item is under warranty.

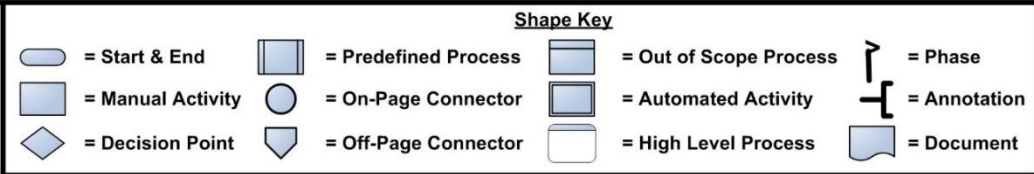
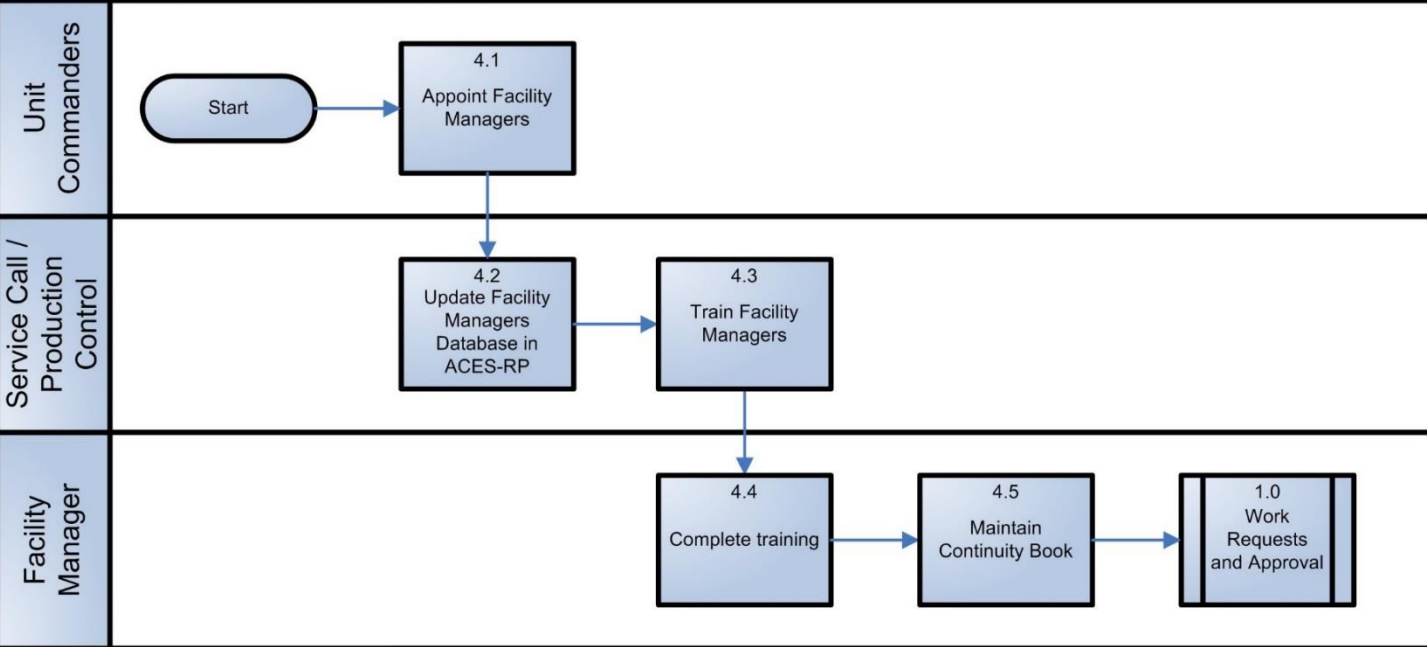
[If 'Yes', proceed to Process 16.0 Warranty / Guarantee Program.](#)

If 'No', End.

Advice and Tips

- If it is a five digit work order, it gets sent back up for recapitalization.

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Operations Support – 4.0 Facility Management Program

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Unit Commander	• Appoint Facility Managers • Notify Service Call / Production Control
Service Call / Production Control	• Update Facility Managers database in ACES-RP • Train Facility Managers
Facility Manager	• Complete training • Maintain Continuity Book

Narrative

Process 4.0 – Facility Management Program

Estimated Completion Time: 10 days

Facility Managers appointed by their organizational commander are responsible for the care, custody, and protection of assigned real property in accordance with all applicable directives. They are the primary point of contact for all fire, safety, security, energy, environmental, services, and maintenance requirements related to their assigned facility. Only an E-4 and above, or civilian equivalent, may be appointed as a primary or alternate Facility Manager. Alternate Facility Managers perform all duties in the absence of the primary.

Step 4.1 – Appoint Facility Managers

Role: Unit Commander

Estimated Completion Time: .2 days

Only the unit commander can appoint a primary and alternate Facility Manager for each facility assigned to the organization; the minimum required grade of appointees is E-4. The appointment memorandum will identify one primary and one alternate Facility Manager, their assigned facility numbers, unit, office symbol, duty phone, home phone, cell phone or pager, and date eligible for return from overseas (DEROS) if applicable. After Facility Managers are appointed, Unit Commanders notify Service Call / Production Control of the appointment by forwarding a copy of the signed appointment memorandum to Service Call / Production Control. Notification can be accomplished by email but must include a scanned copy of the signed appointment memorandum.

[Proceed to Step 4.2.](#)

Step 4.2 – Update Facility Managers database in ACES-RP

Role: Service Call / Production Control

Estimated Completion Time: .05 days

Service Call / Production Control inputs the Facility Managers information from the appointment memorandum into the Automated Civil Engineer System – ACES Real Property (RP) module within five duty days of receipt. If updates are performed by a different section or flight, Service Call / Production Control is still responsible for ensuring the updates are accomplished within the prescribed time.

An updated Facility Manager list with home phone numbers, cell, or pager numbers must be provided each month to the Fire Emergency Services Flight (FES), Command Post, Law Enforcement Desk, and any other 24-hour life, safety, or security operation. Provide an electronic copy unless a hardcopy is specifically requested. It is the releasing agent's responsibility to comply with AFI 33-332, Privacy Act Program.

[Proceed to Step 4.3.](#)

Step 4.3 – Train Facility Managers

Role: Service Call / Production Control

Estimated Completion Time: 5 days

Service Call / Production Control provide the primary and alternate Facility Managers a brief within 10 duty days of their appointment followed by formal training within 60 days of appointment. Group training is ideal until the Advanced Distributed Learning System (ADLS) Online Facility Manager training is available; however, one-on-one training should be conducted as necessary. Once training is complete the training date is annotated in the ACES/RP system. Operations Management will conduct annual refresher training by sending a revalidation questionnaire and any updates to pertinent information that affects Facility Managers. Operations Management will coordinate with subject-matter-experts (SMEs) on training content and be prepared to brief those topics when they cannot participate in a training session. When formal training can be accomplished electronically, it must include a comprehensive test or other means of validating completion.

Example Training Topics:

- AF Form 332 process
- After-hours emergency requests
- Work Priority System
- Response times to different types of work
- Self-Help Program
- Recurring Work Program (RWP)
- Direct Scheduled Work (DSW) request process
- Facility maintenance inspection program and schedule
- Local WO and contract priority systems
- Hazardous spill notification procedures
- Hazardous Material (HAZMAT) disposal procedures
- HAZMAT storage
- Fire prevention requirements
- Life and safety requirements
- Facility security and force protection
- Recycle program policy procedures
- Key control and key/lock replacement reimbursement policy
- Energy conservation
- Mechanical room storage policy
- Shelter-in-Place responsibilities and procedures
- Asbestos and lead health hazards

[Proceed to Step 4.4.](#)

Step 4.4 – Complete Training

Role: Facility Managers

Estimated Completion Time: 2 days

Facility Managers must complete training before they can perform Facility Management duties. When the Facility Manager fails to attend the training they will not be authorized to initiate non-emergency work requests or acquire Self-Help materials. Additional training may be required based on location, unique support infrastructure, or mission.

Examples of additional training are:

- Emergency Generator Operations: Service Call / Production Control in coordination with power production personnel schedule on-site emergency generator training within 60 days of appointment for facilities that are equipped with emergency generators
- Fuel Tank Custodian: Service Call / Production Control in coordination with Logistics Readiness Squadron (LRS) will schedule tank custodian training within 60 days of appointment for facilities that have fuel tanks

[Proceed to Step 4.5.](#)

Step 4.5 – Maintain Continuity Book

Role: Facility Managers

Estimated Completion Time: 2 days

Facility Managers update and maintain a Continuity Book. The book is either a digital or paper based product containing at minimum, the following:

- Appointment Letter
- Local Operating Instruction (OIs)
- Lock Combination List
- AF Form 332s / 1219s
- Work Order Log
- Service Contracts
- Inspection Records (Facility / Energy)
- Environmental Listings
- Safety / Fire Write-Ups
- Key Inventory / Issue Log
- Floor Plans
- Known asbestos and lead health hazards
- Telephone Numbers
 - CE customer service
 - Energy management
 - Service call desk
 - Fire Emergency Services (FES)
 - CE Real Property
 - Safety office
 - CE Environmental
 - Bioenvironmental engineer
 - Self-Help Store
 - Law enforcement

The Facility Managers update the book on a continual basis in the performance of their duties.

[Proceed to Process 1.0 Work Requests and Approvals.](#)

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Operations Support – 5.0 Time Accounting

Roles and Responsibilities Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Service Call / Production Control	• Input Labor into IWIMS • Load individual DSWs / work orders in Interim Work Information Management System (IWIMS) for individual requirements
Shop / Material Control	• Track time in accordance with established Labor Utilization Codes (LUC) for all shop personnel • Ensure Recurring Work Program (RWP), Direct Scheduled Work (DSW), Utility Operations, and Work Orders accurately reflect time expended

Narrative

Accurate time accounting is a critical component used by operations flight leadership, base civil engineers, and higher headquarters to analyze labor data and assess how manpower is being employed, understand shop workload, predict the impact of additional tasks, identify the need for additional manpower, or realign existing manpower. Consistent, accurate time accounting is a significant factor used to create an In-Service Work Plan (IWP), build and maintain a well balanced RWP and ensures labor data used by financial management and other work order subsystems captures actual requirements. Flawed labor accounting will mask manpower issues, distort actual workload, promulgate incongruous decisions and reduce the effectiveness of leadership's ability to make profitable management decisions.

Loading Labor in IWIMS

The decision on whether to have shop Non-Commissioned Officers in Charge (NCOICs) / Foremen or Service Call / Production Control input the labor into IWIMS is a base level decision. As long as labor is consistently loaded in accordance with Air Force level guidance it does not matter who performs the task. Central management at the Service Call / Production Control level typically results in more consistent application of Air Force guidance whereas decentralization at the shop level eliminates duplicate work but only works when implemented in conjunction with a solid training program.

LUCs

LUC 11	RWP
LUC 12	Emergency DSW
LUC 14	Urgent DSW
LUC 15	Minor Construction (M/C) Work Order (WO)
LUC 15-1	Prime Base Engineer Emergency Force (Prime BEEF) M/C WO
LUC 16	Routine DSW
LUC 18	Maintenance and Repair WO
LUC 19	Plant/Utility/Recurring Operations
LUC 20	Prime BEEF training activities such as weapons qualification, Chemical, Biological, Radiological and Nuclear (CBRN) training, home station mobility training, Mission Essential Equipment Training (MEET), Physical Training (PT), field exercises, etc.
LUC 31	Supervision

LUC 32	Other Training (Classroom, 7-Level Courses, Non-Prime BEEF Temporary Duty (TDY) Training Venues, Conferences, etc)
LUC 33	Leave (Military/Civilian)
LUC 34	All other
LUC 38	Overtime
LUC 39	Loaned Labor

Common Mistakes

- Inconsistent use of LUC 34 for long term deployments. MAJCOMs should direct units on how to annotate deployment hours. AFI 32-1001 establishes a unified process to account for deployed manpower.
- Misuse of LUC 19 for labor other than that expended in support of plant or utility operations (e.g., water plant operations).
- Direct Scheduled Work, LUC 16, charged to LUC 11 when performed in conjunction with routine RWP visit. Work performed outside the tasks outlined on the Maintenance Action Sheet (MAS) should be charged to a standalone DSW in order to accurately expense the task in IWIMS.
- Over use of LUC 31, supervision. On site job site supervision should be charged to work order or DSW.
- Use of "Multi" in the IWIMS facility field. Load individual work orders for like work accomplished at multiple facilities. This practice ensures labor is accurately expensed in the facilities where it is expended.

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Operations Support – 6.0 CE Command and Control (C2)

[Roles and Responsibilities](#)

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Roles and Responsibilities

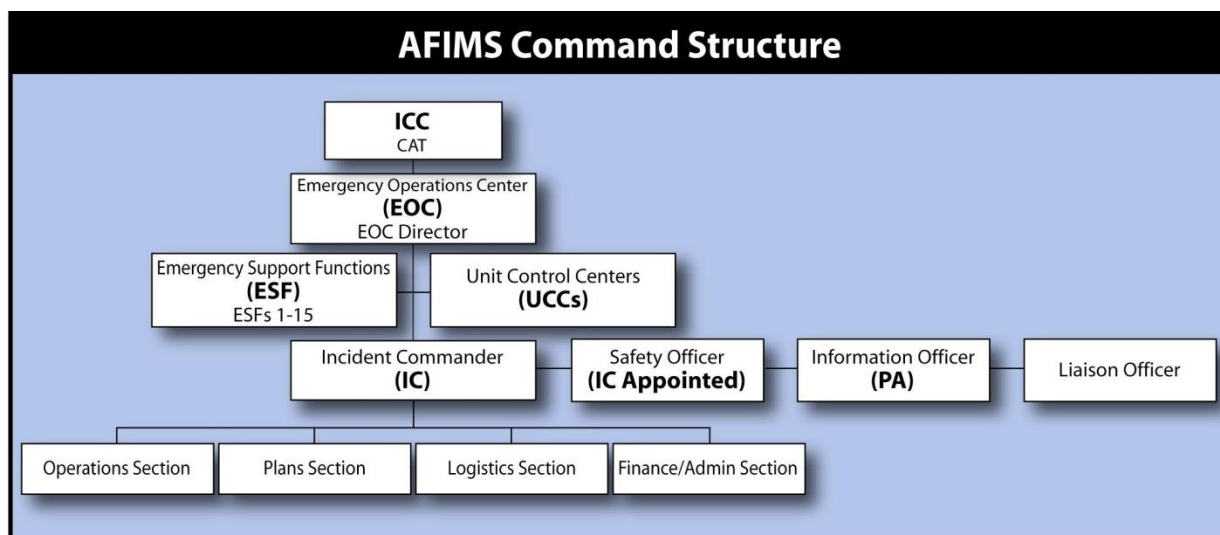
ROLES	RESPONSIBILITIES
Operation Managers	• Standup UCC operations • Establish communications • Collaborate on checklist development • Manage UCC operations • Collect/channel/document data as required
UCC Members	• Execute appropriate checklists as directed • Supervise/direct personnel

Narrative

Civil engineers enable installation commanders to prepare for, respond to, and recover from the consequences of threat-based incidents. As delegated through exercised authority, Operations Managers (3E6X1 personnel) standup and facilitate Unit Control Center (UCC) operations and employ people, facilities, equipment, communications, and procedures during emergency management (EM) operations.

Consequences may range from planning natural disaster repairs to minimizing the effects of Chemical, Biological, Radiological, Nuclear, and High-Yield Explosives (CBRNE) incidents. C2 provides upward, downward, and lateral communication flow and facilitates unit cohesion across the tactical, operational, and strategic levels of mission accomplishment.

In chaotic situations such as the aftermath of a disaster or an attack, effective C2 is crucial for successful installation recovery. Capable C2 relies on an efficient installation recovery organization and communications structure to manage and respond to contingencies. While some confusion is usually present during most crises, proper organization and communications during emergencies limit confusion by clearly defining the chain of command and lines of communication. Each specific consequence or event potentially alters Operations Support involvement and the C2 **Organization**, not to be confused with Air Force Incident Management System (AFIMS) **Command Structure**. UCC should utilize AFPAM 10-219 and related volumes as they pertain to specific event or threats.



Operations Support personnel, in collaboration with Emergency Managers, should prepare or revise supporting CE unit checklists. Generally, checklists should be created for each operating instruction contained in the CE contingency

response plan. Checklists should also be prepared for all other CE contingency or emergency support not otherwise covered in that plan. A good checklist summarizes the tasks specified in an operating instruction or plan, gives each task (and subtask) a number, identifies the Office of Primary Responsibility (OPR) (who will do the task), and states when the task or subtask should be started and/or completed (be sure to clarify which). An execution checklist format can be simple: Task Number (also number subtasks in this column), Task Description, OPR, and Timing (if needed). See AFPAM 10-219 volume 1 for more detailed information on checklist development.

Advice and Tips

- **Avoid making multiple/separate checklists. CE Emergency Management Flight owns Administrative Control (ADCON) for checklist development. It has been experienced on numerous occasions that each center of Operation (EOC, UCC, etc.) will be using different checklists – NOTHING is worse than being on the wrong page in an emergency.**
- **Operations Managers are the KEY to an effective UCC and C2. Be prepared!**
- **Identify and stage required documents, directions, maps, equipment/asset listings, and developed checklists.**
- **Update the Base Civil Engineer (BCE) “travel bag” quarterly.**
- **Determine Alternate UCC ops and associated shortfalls upfront.**
- **Facilitate Superintendent continuity book development – everyone using the same checklists!**
- **Identify/appoint UCC team members and alternates.**

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Operations Support – 7.0 Vehicle Control Operations (VCO)

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Commander	• Appoint Facility Managers • Notify Service Call / Production Control
Vehicle Control Officer (VCO)	• Monitor the status of all assigned vehicles • Prepare reports • Investigates vehicle incidents • Oversees and monitors the Base Civil Engineer (BCE) vehicle operators' training program

Narrative

The Commander appoints the primary and alternate VCO in writing and forwards to Logistics Readiness Squadron (LRS) where the base Vehicle Fleet Manager (VFM) or Vehicle Management Superintendent (VMS) will ensure VCO training is accomplished. Locally developed VCO training should cover all aspects of a VCO's duties. The VCO is tasked with management of the BCE vehicle fleet to include the process and submittal of all vehicle requests from the organization.

At a minimum, unit VCOs are responsible for:

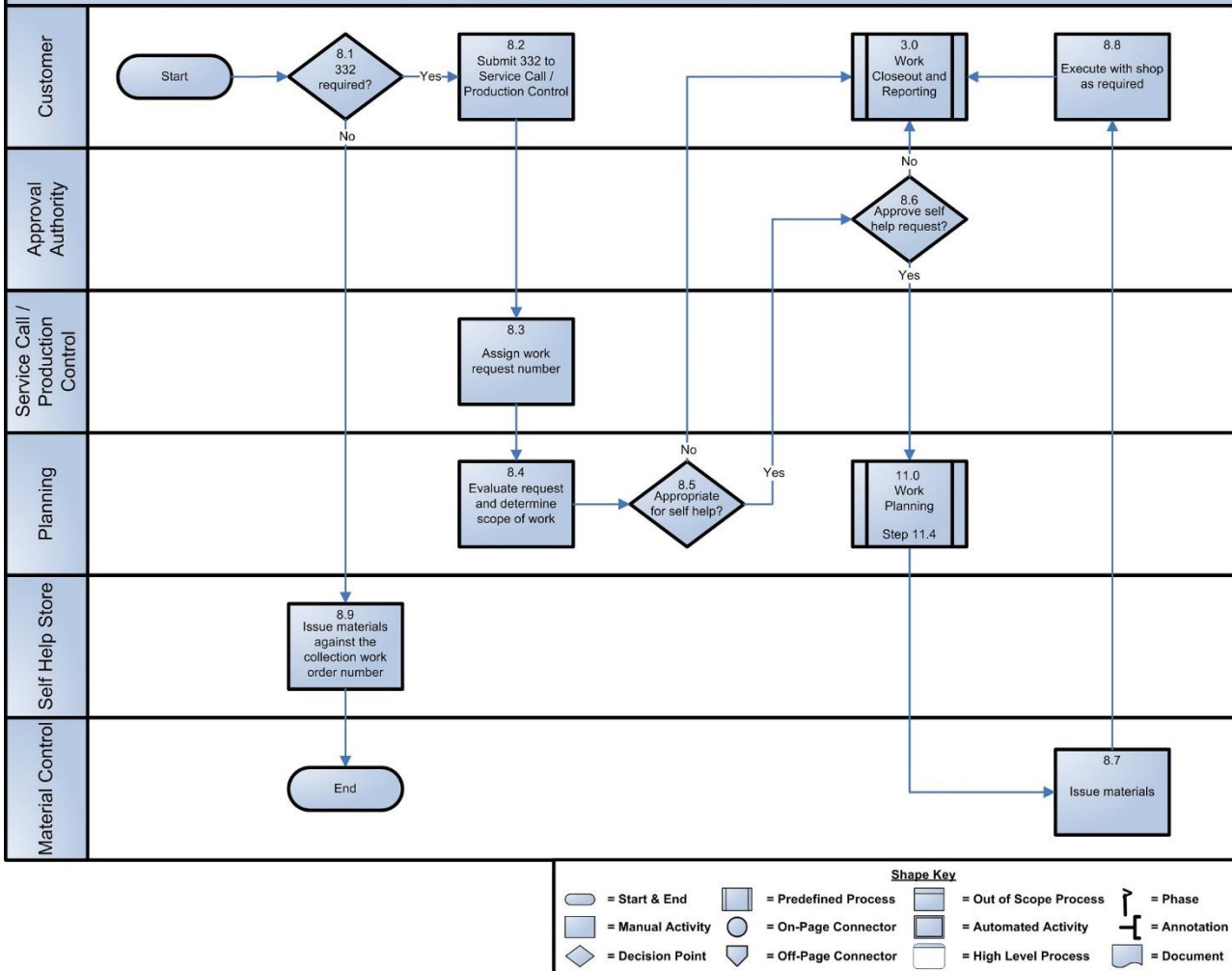
- Acting as a liaison between their unit and the host logistics readiness squadron for all unit government motor vehicle matters.
- Controlling unit vehicles and obtaining transportation services required to support unit mission requirements.
- Defending vehicle requirements, justifying requests for additional vehicle authorizations; complying with the base vehicle rotation and priority recall plans; and notifying the VFM when assigned vehicles are no longer required.
- Providing vehicle management with mission impact statements to substantiate annual base vehicle buy submissions. Providing justification data to support unit minimum essential vehicle levels (MEL).
- Assisting with requests for installation of organizational equipment (vehicle modifications) to the Vehicle Management and Analysis Element.
- Ensuring supplies, tools, and equipment for unit vehicles, such as highway warning kits, first aid kits (when required by local authorities), tire chains, polish, wax, chamois, sponges, jacks, lug wrenches, fire extinguishers, and spare tires (unless items are original equipment on vehicles). These items are procured by the VCO with unit Operations and Maintenance (O&M) funds through Government Purchase Card (GPC) or standard supply chain management.
- Ensuring only qualified and properly licensed military, DOD employees, or authorized DOD contractors who meet the criteria established in AFI 24-301 operate assigned motor vehicles.
- Developing and maintaining unit vehicle lesson plans that have been reviewed by the Distribution Section Chief/Superintendent (DSC/DSS) and VFM/VMS and approved by the unit commander/director.
- Ensuring that operator maintenance is performed and vehicle malfunctions are reported to vehicle management.
- Taking appropriate measures to prevent misuse, abuse and damage to Air Force motor vehicles. Motor vehicle accident, abuse prevention programs at all levels should include: Conducting and documenting monthly vehicle safety orientation and education briefings. Conducting and documenting monthly inspections to ensure assigned vehicles are serviceable and clean.
- Providing flight line training to assigned personnel when required.
- Ensuring unit vehicles are washed and waxed in intervals accordance with local directives.
- Providing vehicle operators with instructions to follow, including agencies to phone, when accidents occur.
- Ensuring low-utilization or low mileage vehicles are rotated with high-usage or high mileage vehicles within the organization.
- Ensuring all unit vehicle leasing actions are coordinated through Vehicle Management.

Additional information can be found in Chapter 8 of AFI 32-1001.

Advice and Tips

- Units may combine duties such as training manager or safety Non-commissioned Officer (NCO) with the VCO position.
- Consider assigning an additional VCO for the Fire Protection Flight to coordinate emergency response vehicle special needs.
- Headquarters (HQ) Air Force Civil Engineer Support Agency (AFCESA) employs the AF CE vehicle manager. This individual can assist VCOs with information, projected changes and forward installation concerns/shortfalls to the AF Transportation functional.

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Operations Support – 8.0 Self Help Program

[Roles and Responsibilities](#)

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[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer	- Initiate the process - Submit AF Form 332 - Execute work with Shop as required
Approval Authority	Approve self help request
Service Call / Production Control	Assign a work request number
Planning	- Evaluate requests and determine scope of work - Determine if work is appropriate for self help
Self Help Store	Issue materials
Material Control	Issue materials
CE Craftsmen	Provide trade skill assistance as required

Narrative

Process 8.0 – Self Help Program

Estimated Completion Time: N/A

The Self Help Program is a force multiplier, especially in times of constrained budgets and manning. The correctly administered Self Help Program can improve facilities and foster feelings of pride and ownership. Each installation will direct its Self Help Program in a manner unique to its requirements and regulations. A self help request is initiated when the customer requires / needs work completed in their facility. The Self Help Program provides base personnel an opportunity to exercise their personal construction trade skills. Instances when an area of expertise within the scope of the work exceeds those predetermined skills, the customer will be augmented by CE craftsmen to bridge the trade specific gap.

Decision 8.1 – 332 required?

Role: Customer

Estimated Completion Time: 1 day

The customer determines if the work requires a 332. If the work is beyond the scope of what a customer can perform as a self help project, unit approval must be obtained prior to submittal of a 332 to Service Call/Production Control. If a 332 is not required, the customer can go to the Self Help Store and request and/or order materials.

[If 'Yes', proceed to Step 8.2.](#)

[If 'No', proceed to Step 8.9.](#)

Step 8.2 – Submit 332 to Service Call / Production Control

Role: Customer

Estimated Completion Time: 1 day

Depending on the type of work required, the customer may submit a Form 332 to Service Call/Production Control.

[Proceed to Step 8.3.](#)

Step 8.3 – Assign work request number

Role: Service Call / Production Control

Estimated Completion Time: 1 day

Service Call/Production Control assigns a work request number to the work request.

[Proceed to Step 8.4.](#)

Step 8.4 – Evaluate request and determine scope of work

Role: Planning

Estimated Completion Time: 1 day

Once the work request number is assigned, the CE Planning section evaluates the request and determines the scope of work. The evaluation determines whether the work requires CE support or can be completed by the requestor.

[Proceed to Decision 8.5.](#)

Decision 8.5 – Appropriate for Self Help?

Role: Planning

Estimated Completion Time: 1 day

Planning determines if the scope of the work is appropriate for self help.

[If 'Yes', proceed to Decision 8.6.](#)

[If 'No', proceed to Process 3.0 Work Closeout and Reporting.](#)

Decision 8.6 – Approve self help request?

Role: Approval Authority

Estimated Completion Time: 1 day

If CE support is required the Approval Authority must approve the Self Help Request through the Work Request Review Board (WRRB) or Self Help Planner.

[If 'Yes', proceed to Process 11.0 Work Planning, Step 11.4:](#)

[Then, proceed to Step 8.7.](#)

[If 'No', proceed to Process 3.0 Work Closeout and Reporting.](#)

Step 8.7 – Issue materials

Role: Material Control

Estimated Completion Time: 1 day

Once the request is approved and planned, Material Control issues the materials based on the work order.

[Proceed to Step 8.8.](#)

Step 8.8 – Execute with Shop as required

Role: Customer

Estimated Completion Time: Varies depending on scope of work

Once the Customer receives the proper approval and materials, the Customer can execute the work with Shop assistance as required. The Shop is required to complete a check/review for quality control of the work during the process and upon completion. Any damage or mistakes are paid for by shop. Refer to the Self Help Guide for additional information.

[Proceed to Process 3.0 Work Closeout and Reporting.](#)

Step 8.9 – Issue Materials against the collection work order number

Role: Self Help Store

Estimated Completion Time: 1 day

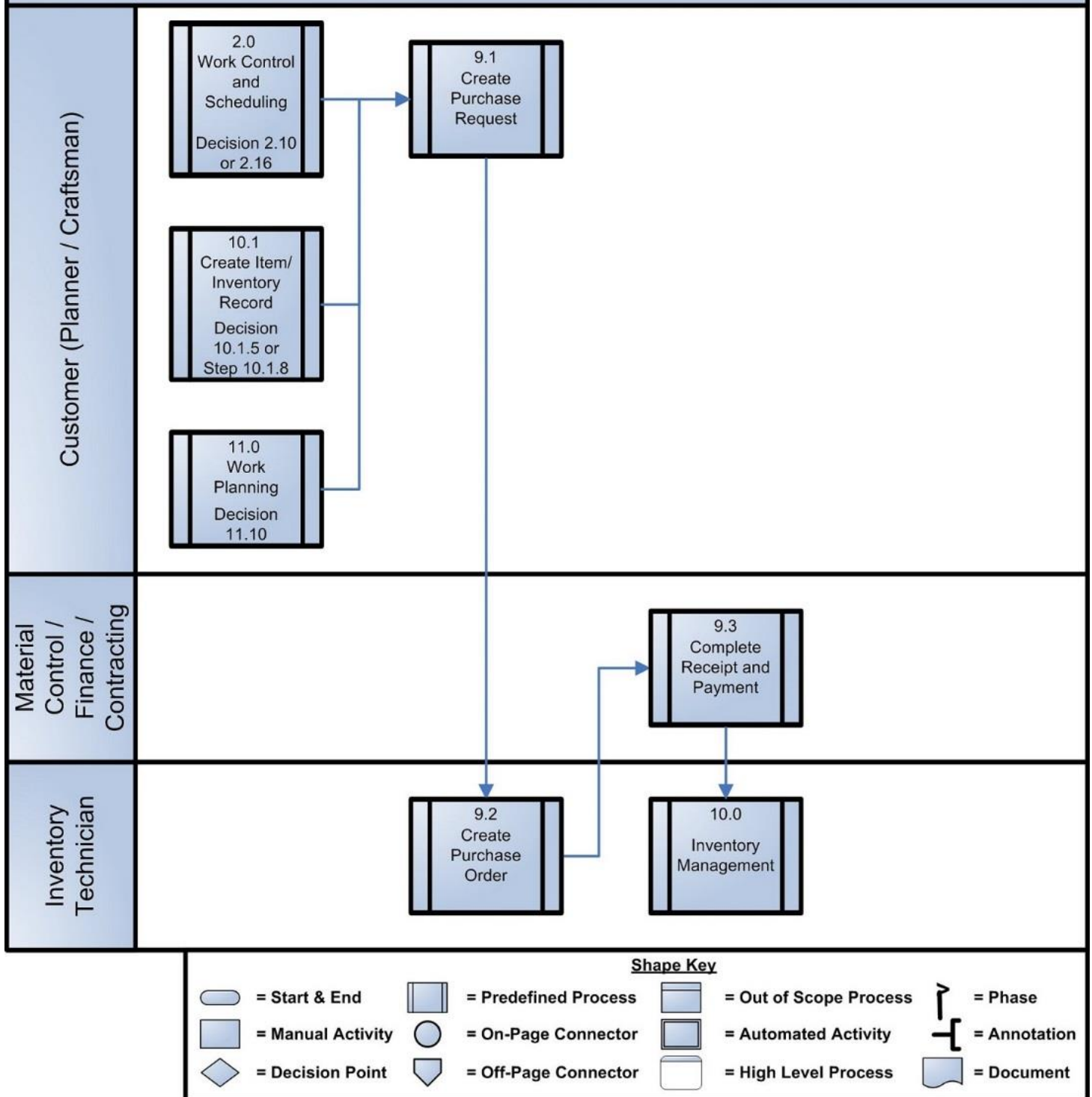
If the work does not require a Form 332, the Self Help Store issues materials to the Customer against the collection work order number assigned to the requestors facility/organization.

End.

Advice and Tips

- Shops provide technical advice and help in completing the work if CE support is required.

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Operations Support – 9.0 Material Acquisition

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer (Planner / Craftsman)	Create purchase request
Material Control / Finance / Contracting	Handle receipt and payment of materials
Inventory Technician	Create purchase order

Narrative

Process 9.0 – Material Acquisition

Estimated Completion Time: N/A

The Civil Engineer (CE) Material Acquisition function manages and controls logistics support for CE activities. It accounts for all activities related to Class IV material handling, receiving, warehousing, and distribution of materials. Where Contractor-Operated Civil Engineer Supply Stores (COCESS) provides logistics support, Quality Assurance Evaluators (QAEs) monitor the COCESS contract in accordance with the applicable Performance Work Statement (PWS).

The process Material Acquisition process includes material needed to support work requests, the development of purchase orders (POs), and initiating the payment process through confirmation of all materials received.

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.10.](#)

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.16.](#)

[Entry from Process 10.1 Create Item / Inventory Record, Decision 10.1.5.](#)

[Entry from Process 10.1 Create Item / Inventory Record, Step 10.1.8.](#)

[Entry from Process 11.0 Work Planning, Decision 11.10.](#)

Step 9.1 – Create Purchase Request (PR)

Role: Customer (Planner / Craftsman)

Estimated Completion Time: 14 days

The process is initiated when the Customer, Planner, or Craftsman identifies a need for material support requiring a purchase request (PR) or material. The Material Acquisition Personnel coordinates the approval of the PR and determines funding availability, source or reimbursable activity cost account code(s). The Inventory Technician then reviews and validates the PR line items to ensure they adequately support the request, and evaluates the current inventory level to determine if items are on-hand. Once it is determined items are not in on-hand, Process 9.2, Create Purchase Order is initiated. For additional information, see Process 9.1 Create Purchase Request.

[Proceed to Step 9.2.](#)

Step 9.2 – Create Purchase Order (PO)

Role: Inventory Technician

Estimated Completion Time: 2 days

The Inventory Technician determines the most appropriate, efficient procurement vehicle to execute material Support through the use of the Government Purchase Card (GPC), Form 9, Depots, Government-Operated Civil Engineer Supply Stores (GOCESS) or COCESS. Once the vehicle is determined, the Inventory Technician creates and dispatches the PO. Once the Vendor receives the PO, the process triggers Process 9.3 Receipt and Payment. For additional information, see Process 9.2 Create Purchase Order.

[Proceed to Step 9.3.](#)

Step 9.3 – Complete receipt and payment

Role: Material Control / Finance / Contracting

Estimated Completion Time: 1 day

The process is initiated when the line items detailed on the Purchase Order reach the destination of consumption. The Inventory Technician inspects the items, validates the products received match the Purchase Order, and enters the physical record into the system. The process ends when Material Control/Finance/Contracting receives and pays the invoice. For additional information, see Process 9.3 Complete Receipt and Payment.

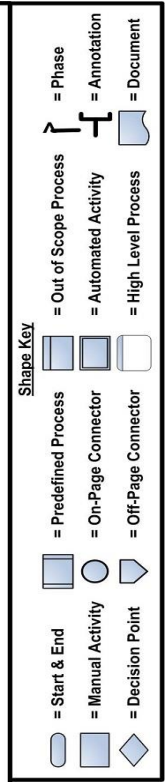
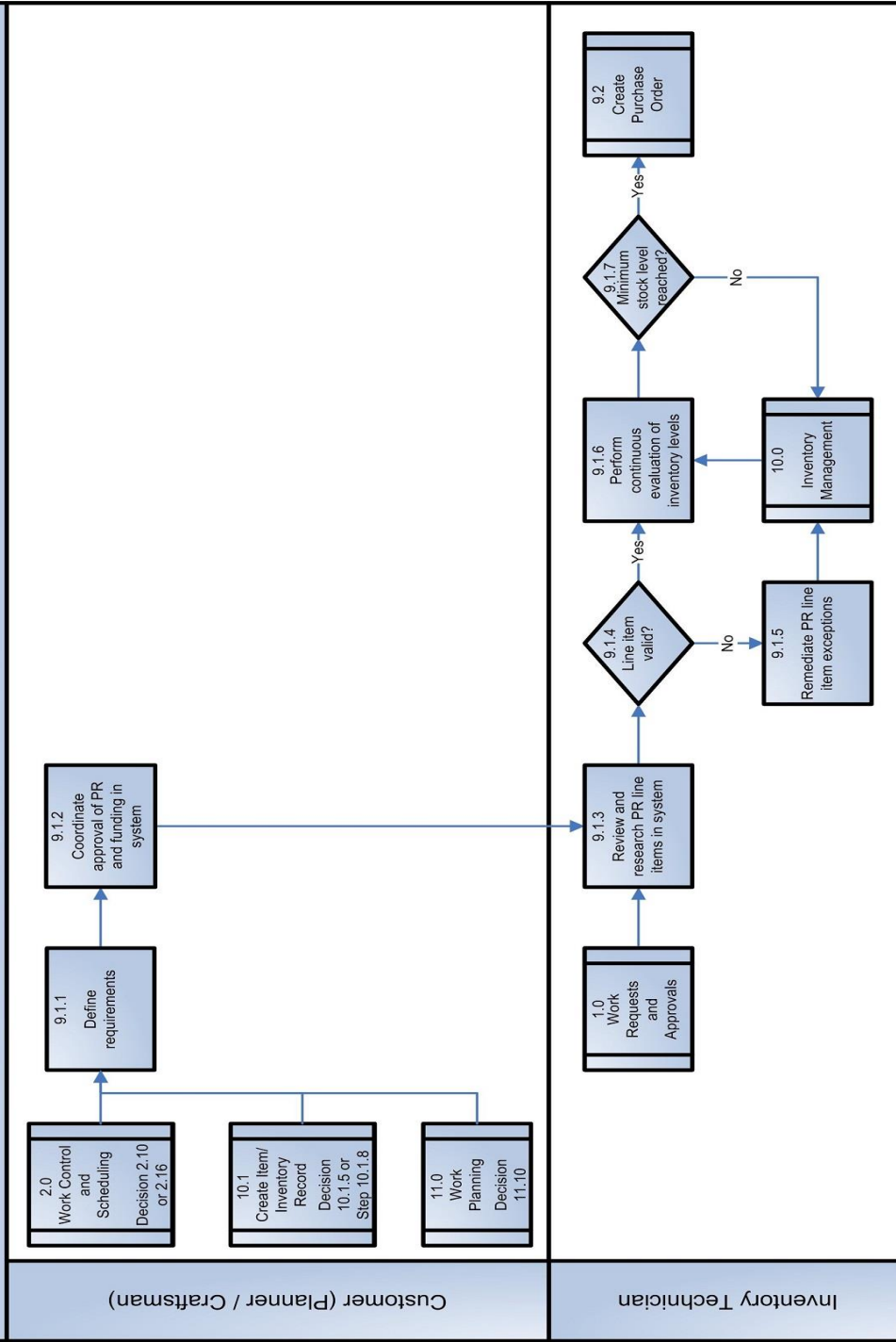
[Proceed to Process 10.0 Inventory Management.](#)

Advice and Tips

- BE SURE to determine if this is a reimbursable work request and/or the items will be used on system still covered under Warranty / Guarantee.
- Sole Source: It is necessary to get sole source justification when specified by the requestor. DO NOT arbitrarily substitute like-type items in the system without consulting the requestor / craftsman.
- Inventory personnel are not the final user of products received. It is highly recommended Shop Craftsman be involved in validating items received. Critical parts/items misidentified as correct by material control slow or stops productivity.

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Operations Support – 9.1 Create Purchase Request – Version: 06/16/2010



Operations Support – 9.1 Create Purchase Request

[Roles and Responsibilities](#)

[Narrative](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer (Planning / Craftsman)	• Define requirements • Coordinate approval and funding
Inventory Technician	• Review and research PR line items • Validate line items • Evaluate stock levels

Narrative

Process 9.1 – Material Acquisition – Create Purchase Request

Estimated Completion Time: 14 days

The process is initiated when the Customer (Planner / Craftsman) identifies a need for a Purchase Request (PR). Material Acquisition personnel coordinate the approval of the PR and funding. The Inventory technician then reviews and validates the PR line items, and evaluates the current inventory level. The process then triggers Process 9.2, Create Purchase Order.

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.10.](#)

[Entry from Process 2.0 Work Control and Scheduling, Decision 2.16.](#)

[Entry from Process 10.1 Create Item / Inventory Record, Decision 10.1.5.](#)

[Entry from Process 10.1 Create Item / Inventory Record, Step 10.1.8.](#)

[Entry from Process 11.0 Work Planning, Decision 11.10.](#)

Step 9.1.1 – Define requirements

Role: Customer (Planner / Craftsman)

Estimated Completion Time: 7 days

The Customer defines the requirements for the PR from the Bill of Materials (BOM) and the current inventory stock. Customers work together with acquisitions personnel to load requirement into the Interim Work Information Management System (IWIMS) work estimating tool.

[Proceed to Step 9.1.2.](#)

Step 9.1.2 – Coordinate approval of PR and funding in system

Role: Customer (Planner / Craftsman)

Estimated Completion Time: 1 day

Once the requirements are defined, the Customer coordinates approval of the PR and funding in the system. This is an automated process tracked in IWIMS and coordinated by the Operations Manager to the appropriate approval authority.

[Proceed to Step 9.1.3.](#)

Step 9.1.3 – Review and research PR line items in system

Role: Inventory Technician

Estimated Completion Time: 3 days

[Entry from Process 1.0 Work Requests and Approval](#)

The Inventory Technician receives, reviews, and researches the PR line items in the system for validity. Technician determines the part number is validity, source of supply and procurement method during this process.

[Proceed to Decision 9.1.4.](#)

Decision 9.1.4 – Line item valid?

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician then determines if the line items are valid. If yes, the process continues. If no, the Inventory Technician must remediate the line item exceptions before continuing.

[If 'Yes', proceed to Step 9.1.6.](#)

[If 'No', proceed to Step 9.1.5.](#)

Step 9.1.5 – Remediate PR line item exceptions

Role: Inventory Technician

Estimated Completion Time: 1 day

If the line items are not valid, the Inventory Technician remediates the PR line item exceptions. The Technician updates inconsistencies with the Planner or Craftsman to eliminate any conflicts

[Proceed to Process 10.0 Inventory Management.](#)

[Then, proceed to Step 9.1.6.](#)

Step 9.1.6 – Perform continuous evaluation of inventory levels

Role: Inventory Technician

Estimated Completion Time: Monthly

Once all line items are validated IWIMS, the Inventory Technician continually evaluates and matches current inventory levels with established required minimum inventory levels.

[Proceed to Decision 9.1.7.](#)

Decision 9.1.7 – Minimum stock level reached?

Role: Inventory Technician

Estimated Completion Time: Monthly

The Inventory Technician determines when physical on hand quantities reach the minimum stock level through the use of the Civil Engineering Materiel Acquisition System (CEMAS) report functions. If the minimum stock level is reached, reference the Store Maintenance Reorder document and proceed to Create Purchase Order. If the minimum stock level is not reached, the process continues to Inventory Management.

Note: CEMAS provides automated inventory control and visibility of assets. The purpose of an inventory is to identify and correct errors in processing and storage operations through reconciliation of item and detail record balances with quantities of stock physically on-hand. All items with physical on hand quantities will be inventoried at least annually.

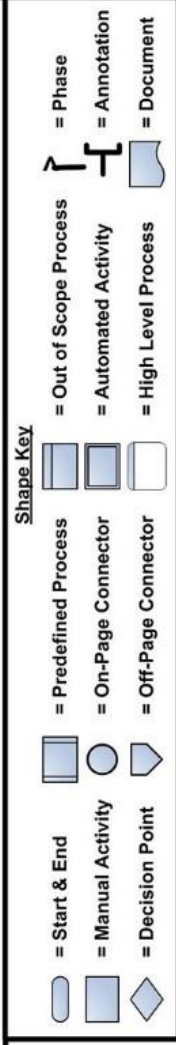
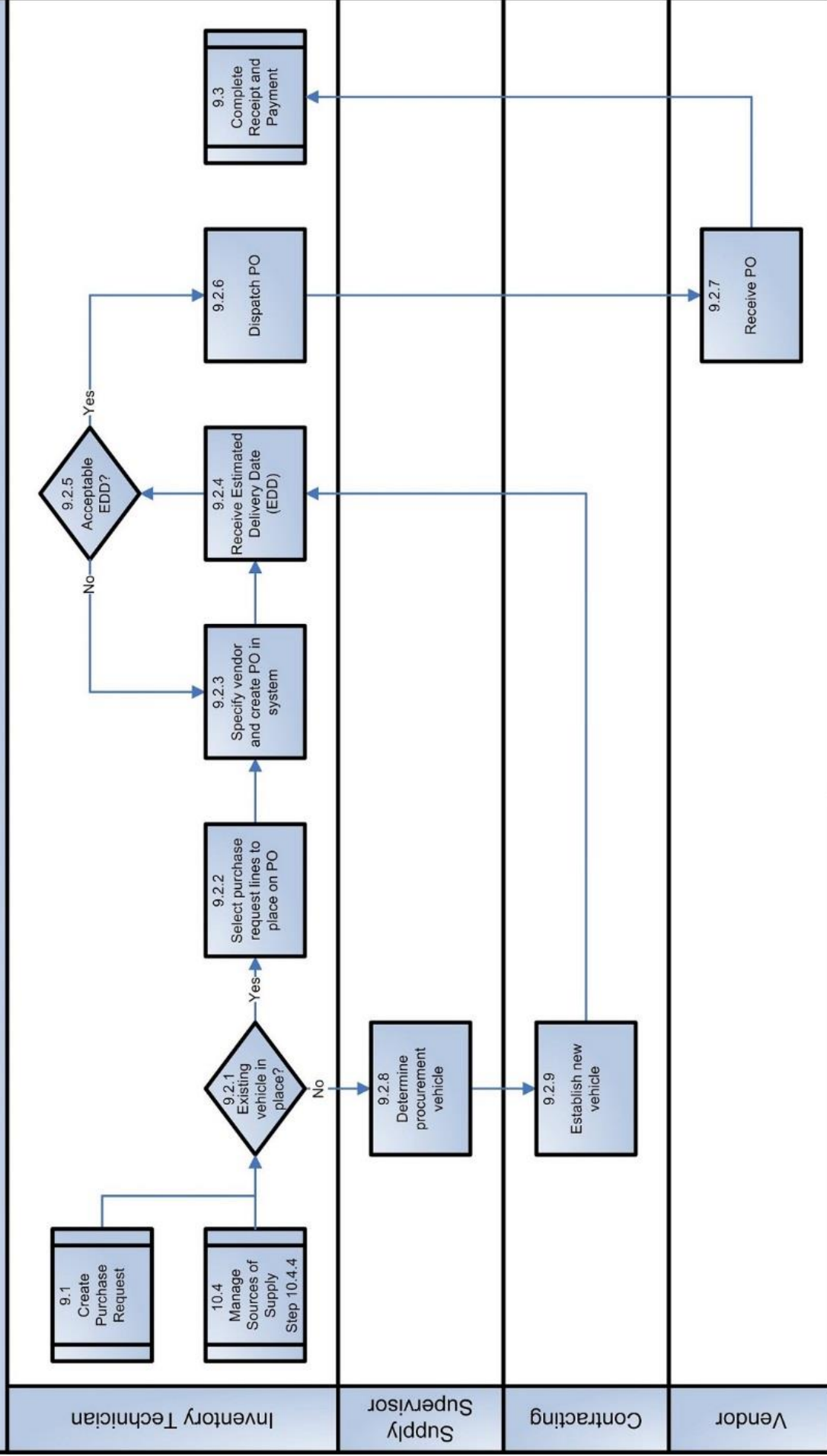
[If 'Yes', proceed to Process 9.2 Create Purchase Order.](#)

[If 'No', proceed to Process 10.0 Inventory Management;](#)

[Then, proceed to Step 9.1.6.](#)

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Operations Support – 9.2 Create Purchase Order – Version: 06/16/2010



Operations Support – 9.2 Create Purchase Order

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Inventory Technician	• Determine if there is an existing vehicle in place • Select purchase request lines to place in PO • Select Vendor • Create PO • Accept EDD • Dispatch PO
Supply Supervisor	• Determine procurement vehicle
Contracting	• Establish new procurement vehicle
Vendor	• Receive PO

Narrative

Process 9.2 – Create Purchase Order (PO)

Estimated Completion Time: 2 days

The process is initiated when the Inventory Technician determines of the procurement vehicle. Possible vehicle types include Government Purchase Card (GPC), Form 9, Government-Operated Civil Engineer Supply Stores (GOCESS), Contractor-Operated Civil Engineer Supply Stores (COCESS), etc. Once the vehicle is determined, the Inventory Technician creates and dispatches the PO. Once the Vendor receives the PO, the process triggers Process 9.3 Receipt and Payment.

[Entry from 9.1 Create Purchase Request.](#)

[Entry from 10.4 Manage Sources of Supply, Step 10.4.4.](#)

Decision 9.2.1 – Existing vehicle in place?

Role: Inventory Technician

Estimated Completion Time: N/A

The process begins when the Inventory Technician determines if there is an existing vehicle in place. If an existing vehicle is in place, the process continues; if an existing vehicle is not in place, the Supply Supervisor determines the procurement vehicle.

List of items: 1. Strategic sourcing; 2. Internal requisition including inter-base transfers; 3. Prime vendor / Indefinite Delivery, Indefinite Quantity (IDIQ) / Blanket Purchase Agreement (BPA); 4. COCESS / GOCESS; 5. Standard Base Supply System (SBSS) / Integrated Logistics Supply System (ILS-S); 6. GPC Cards; 7. Contracting

[If 'Yes', proceed to Step 9.2.2.](#)

[If 'No', proceed to Step 9.2.8.](#)

Step 9.2.2 – Select purchase request lines to place on PO

Role: Inventory Technician

Estimated Completion Time: 2 days

Inventory Technician selects the purchase request line items to place on the PO. Technician should consider need-Emergency, Urgent, or Routine to limit costs while still meeting the operational need.

[Proceed to Step 9.2.3.](#)

Step 9.2.3 – Specify vendor and create PO in system

Role: Inventory Technician

Estimated Completion Time: 1 day

Once the Purchase Request (PR) lines are in place, the Inventory Technician specifies the vendor and creates the PO in the system. Sole source requirements require additional approval/justification.

[Proceed to Step 9.2.4.](#)

Step 9.2.4 – Receive Estimated Delivery Date (EDD)

Role: Inventory Technician

Estimated Completion Time: 2 days

Once the PO is submitted to the Vendor, the Inventory technician receives an EDD.

[Proceed to Decision 9.2.5.](#)

Decision 9.2.5 – Acceptable EDD?

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician determines if the EDD is acceptable for receiving the materials. This is dependent on the use of the materials, project timelines, etc. If the EDD is not acceptable, the Inventory Technician may go back and specify a new vendor. If the EDD is acceptable, the process continues. It is important that the Inventory Technician communicates any Revised Delivery Dates (RDDs) to the shops.

[If 'Yes', proceed to Step 9.2.6.](#)

[If 'No', proceed to Step 9.2.3.](#)

Step 9.2.6 – Dispatch PO

Role: Inventory Technician

Estimated Completion Time: 1 day

Once the Inventory Technician accepts the EDD, they dispatch the PO to the Vendor. Technician will update RDD in Interim Work Information Management System (IWIMS) upon acceptance of the EDD.

[Proceed to Step 9.2.7.](#)

Step 9.2.7 – Receive PO

Role: Vendor

Estimated Completion Time: N/A

The Vendor receives the dispatched PO from the Inventory Technician.

[Proceed to Process 9.3 Complete Receipt and Payment.](#)

Step 9.2.8 – Determine procurement vehicle

Role: Supply Supervisor

Estimated Completion Time: 2 days

If there is not an existing vehicle in place, the Supply Supervisor determines the procurement vehicle. Possible vehicle types include GPC, Form 9, GOCESS, COCESS, etc.

[Proceed to Step 9.2.9.](#)

Step 9.2.9 – Establish new vehicle

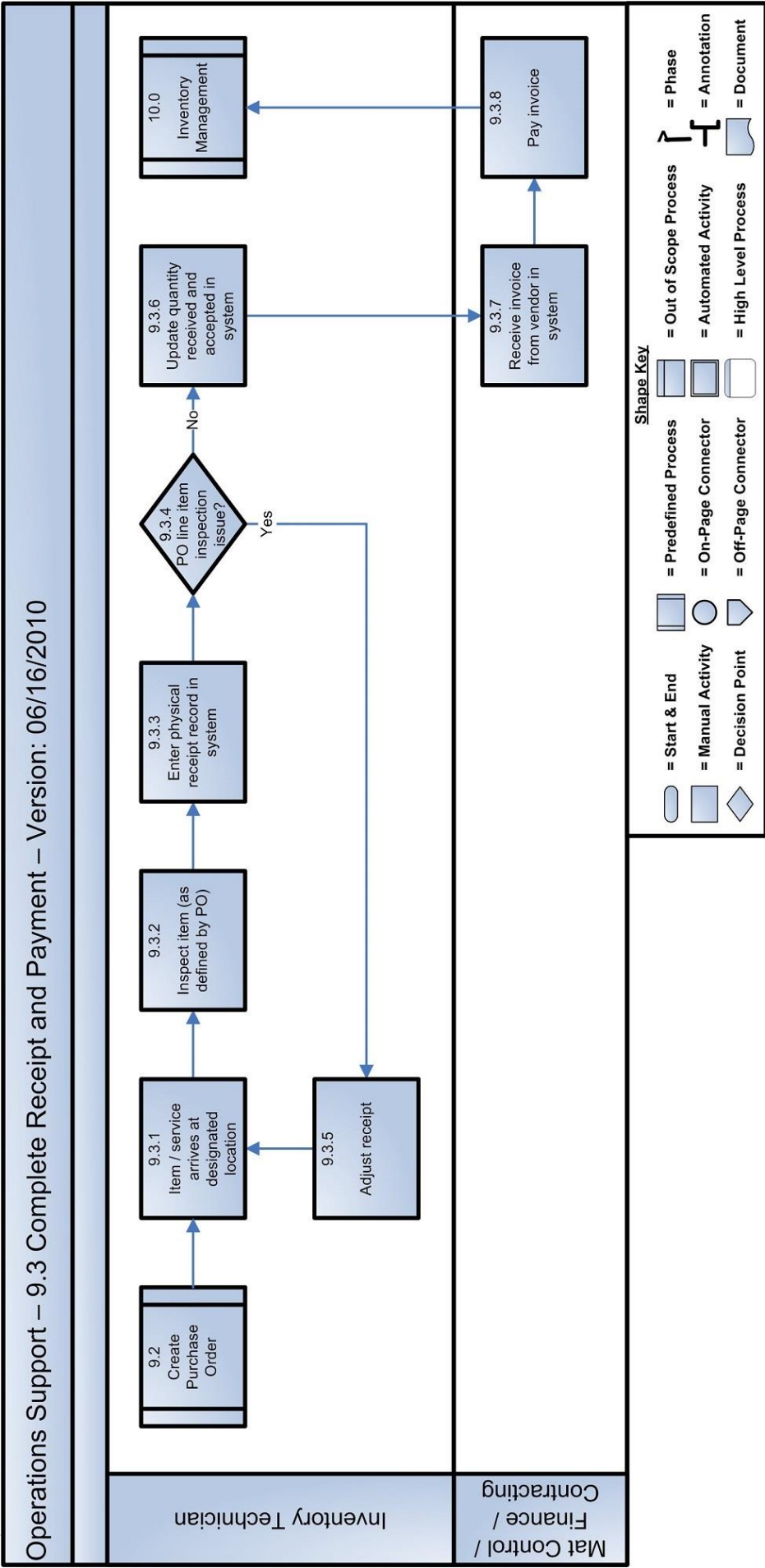
Role: Contracting

Estimated Completion Time: 2 days

Once the Supply Supervisor determines the vehicle, Contracting established the new vehicle.

[Proceed to Step 9.2.4.](#)

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Operations Support – 9.3 Complete Receipt and Payment

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Inventory Technician	- Item / service arrives at designated location - Inspect items - Enter physical receipt record in system - Determine if PO line item inspection has an issue - Adjust receipt - Update quantity received and accepted in system
Material Control / Finance / Contracting	Receive and pay invoices

Narrative

Process 9.3 – Complete Receipt and Payment

Estimated Completion Time: 2 weeks

The process is initiated upon completion of the Purchase Order (PO). The Inventory Technician inspects the items and enters the physical record into the system. The process ends when Material Control/Finance/Contracting receives and pays the invoice.

[Entry from Process 9.2 Create Purchase Order.](#)

Step 9.3.1 – Item / service arrives at designated location

Role: Inventory Technician

Estimated Completion Time: 1 day

The process begins when the item arrives at the designated location.

The Inventory Technician checks the following: 1. Location is correct; 2. Order; 3. Delivery date; 4. Visible damage; 5. Hazardous Material (HAZMAT) product documentation; 6. Sign receiving document.

[Proceed to Step 9.3.2.](#)

Step 9.3.2 – Inspect item (as defined by PO)

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician inspects the item as defined by the PO. The Technician has the authority to deny the items if they are damaged or not the exact order. Check for the following: 1. Correct item; 2. Correct quantity; 3. Damage; 4. Correct location; 5. Labels; 6. Complete documentation (warranties, manuals, inspection and safety information, handling restrictions, Hazard Communication (HAZCOM), etc.); 7. Shelf life and / or expiration date.

[Proceed to Step 9.3.3.](#)

Step 9.3.3 – Enter physical receipt record in system

Role: Inventory Technician

Estimated Completion Time: 1 day

Once accepted, the Inventory Technician enters the physical receipt record of the item into the system. The Inventory Technician coordinates with contracting and / or technician as required to update the status of the item.

[Proceed to Decision 9.3.4.](#)

Decision 9.3.4 – PO line item inspection issue?

Role: Inventory Technician

Estimated Completion Time: 1 day

Once the information is entered into the system, the Inventory Technician identifies any issues with the PO line items. If there are issues, the Inventory Technician adjusts the receipt. If there are no issues identified, the process continues.

[If 'Yes', proceed to Step 9.3.5.](#)

[If 'No', proceed to Step 9.3.6.](#)

Step 9.3.5 – Adjust receipt

Role: Inventory Technician

Estimated Completion Time: 1 day

If the Inventory Technician identifies issues in the PO lines, they adjust the receipt. The Technician properly documents specifics.

[Proceed to Step 9.3.1.](#)

Step 9.3.6 – Update quantity received and accepted in system

Role: Inventory Technician

Estimated Completion Time: 1 day

If there are not issues identified with the PO line items, the Inventory Technician updates the quantity received and accepted into the system. Complete the following tasks in the system: warranty information, vendor-provided training requirements, installation / maintenance documentation, check preventative maintenance requirements, storage requirements (shelf life and expiration), serial number, and installed location.

[Proceed to Step 9.3.7.](#)

Step 9.3.7 – Receive invoice from vendor in system

Role: Material Control / Finance / Contracting

Estimated Completion Time: 1 day

Material Control / Finance / Contracting receives the invoice from the Vendor in the system (wide area work flow (WAWF)).

[Proceed to Step 9.3.8.](#)

Step 9.3.8 – Pay invoice

Role: Material Control / Finance / Contracting

Estimated Completion Time: 3 days

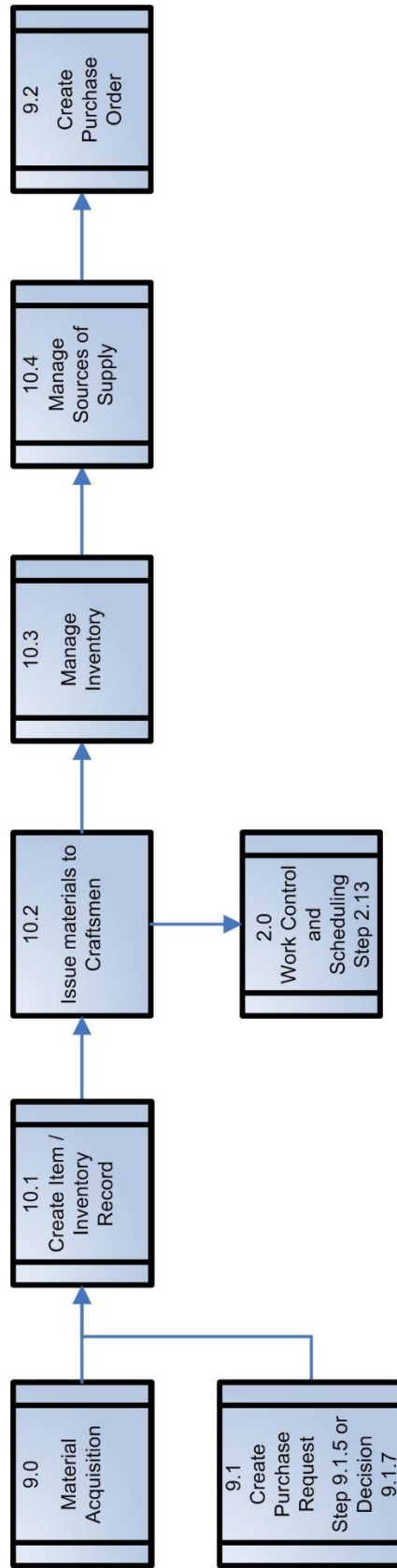
Material Control / Finance / Contracting pays the invoice to the Vendors and the process ends.

[Proceed to Process 10.0 Inventory Management.](#)

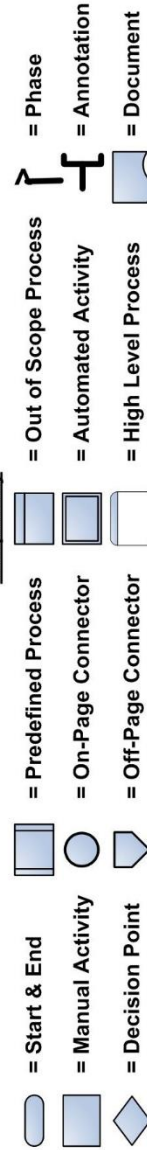
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Operations Support – 10.0 Inventory Management – Version: 06/16/2010

Inventory Technician



Shape Key



Operations Support – 10.0 Inventory Management

[Roles and Responsibilities](#) [Narrative](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Inventory Technician	• Create Item/Inventory Record • Issue materials to Craftsmen • Manage Inventory • Manage Sources of Supply

Narrative

Process 10.0 – Inventory Management

Estimated Completion Time: N/A

Civil Engineer Material Acquisition System (CEMAS) was designed to provide automated inventory control and visibility of assets. The purpose of an inventory is to identify and correct errors in processing and storage operations through reconciliation of item and detail record balances with quantities of stock physically on-hand. All items with physical on hand quantities will be inventoried at least annually. It is important to note that the technician performing the duties of the Receiving Clerk cannot be the same technician performing the duties of the Inventory Technician.

[Entry from Process 9.0 Material Acquisition.](#)

[Entry from Process 9.1 Create Purchase Request, Step 9.1.5.](#)

[Entry from Process 9.1 Create Purchase Request, Decision 9.1.7.](#)

Step 10.1 – Create Item/Inventory Record

Role: Inventory Technician

Estimated Completion Time: N/A

The Inventory Technician creates the item/inventory record. Examples of vehicle types include Government Purchase Card (GPC) and Form 9. For additional information, see Process 10.1 Create Item/Inventory Record.

[Proceed to Step 10.2.](#)

Step 10.2 – Issue materials to Craftsmen

Role: Inventory Technician

Estimated Completion Time: N/A

The Inventory Technician issues materials to Craftsmen to obtain materials and equipment.

[Proceed to Process 2.0 Work Control and Scheduling, Step 2.13.](#)

[Proceed to Step 10.3.](#)

Step 10.3 – Manage Inventory

Role: Inventory Technician

Estimated Completion Time: Ongoing

The Inventory Technician manages inventory. For additional information, see Process 10.3 Manage Inventory.

[Proceed to Step 10.4.](#)

Step 10.4 – Manage Sources of Supply

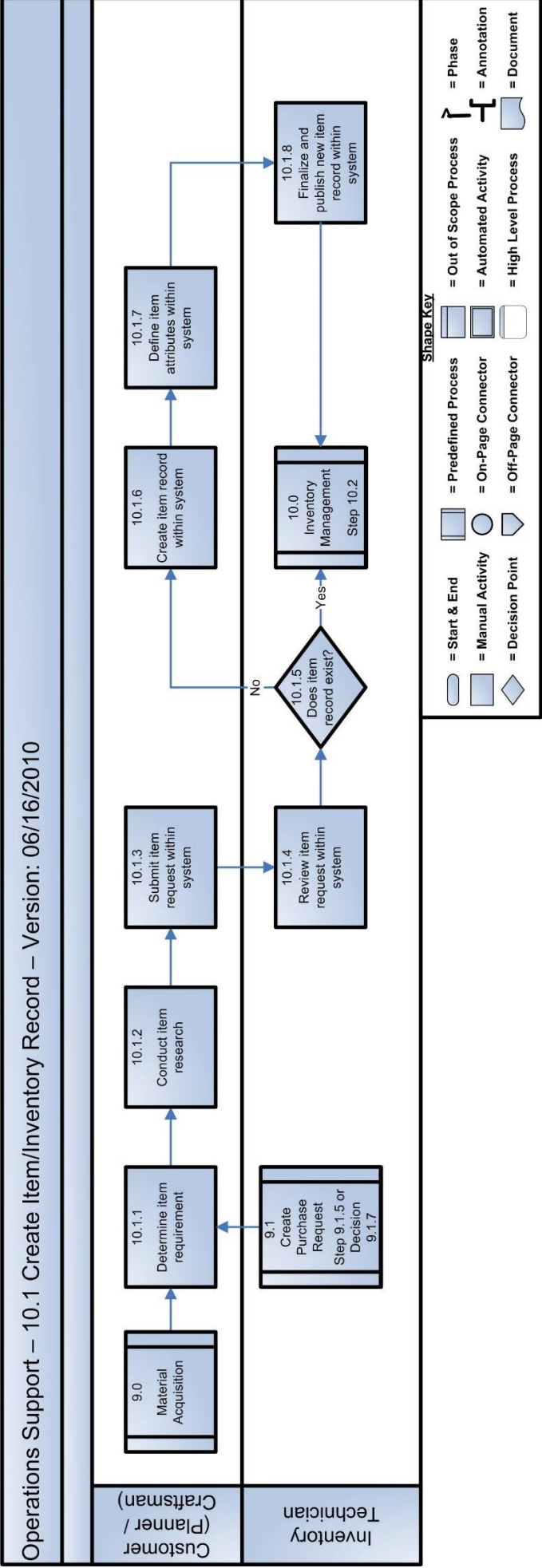
Role: Inventory Technician

Estimated Completion Time: N/A

The Inventory Technician manages the sources of supply. For additional information, see Process 10.4 Manage Sources of Supply.

[*Proceed to Process 9.2 Create Purchase Order.*](#)

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Operations Support – 10.1 Create Item/Inventory Record

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer (Planner / Craftsman)	• Provide Bill of Materials (BOM) to Inventory Technician • Coordinates with Inventory Technician to performs product research • Submit item request within system • Create item record within system • Define item attributes within system
Inventory Technician	• Perform research • Ensure items are not duplicated in Civil Engineer Material Acquisition System (CEMAS) • Create item record within system • Finalize and publish new item record in CEMAS

Narrative

Process 10.1 – Create Item/Inventory Record

Estimated Completion Time: N/A

Using CEMAS, the Inventory Technician create Consolidated Stock Listings (CSLs) that contain descriptive information of an item or combination of materials and services related to a unique requirement.

[Entry from Process 9.0 Material Acquisition.](#)

[Entry from Process 9.1 Create Purchase Request, Step 9.1.5.](#)

[Entry from Process 9.1 Create Purchase Request, Decision 9.1.7.](#)

Step 10.1.1 – Determine item requirement

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

The Customer works with the Inventory Technician to determine whether any required item is the same as a CSL already in CEMAS.

[Proceed to Step 10.1.2.](#)

Step 10.1.2 – Conduct item research

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

The Inventory Technician and the Customer are both able to perform research to ensure products/materials have the required level of performance for the lowest cost to the government.

[Proceed to Step 10.1.3.](#)

Step 10.1.3– Submit item request within system

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

Once identified, the Customer submits item request within the system.

[Proceed to Step 10.1.4.](#)

Step 10.1.4– Review item request within system

Role: Inventory Technician

Estimated Completion Time: N/A

The Inventory Technician receives notification to review the item request within the system.

[Proceed to Decision 10.1.5.](#)

Decision 10.1.5– Does item record exist?

Role: Inventory Technician

Estimated Completion Time: 1 day

Before creating CSLs, the Inventory Technician performs research to ensure there is not already a CSL for any item on the BOM.

[If 'Yes', proceed to Process 10.0 Inventory Management, Step 10.2.](#)

[If 'No', proceed to Step 10.1.6.](#)

Step 10.1.6– Create item record within system

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

If it does not exist, the Inventory Technician coordinates with the Customer to define the item and then enters it into CEMAS.

[Proceed to Step 10.1.7.](#)

Step 10.1.7– Define item attributes within system

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

The attributes for a CSL include: nomenclature, item description, potential vendors / manufacturers, warranty information, safety and HAZMAT considerations, classification, suitable substitutions, shelf-life, unit of measurement / issue, stock or non-stock (federal stock number).

[Proceed to Step 10.1.8.](#)

Step 10.1.8– Finalize and publish new item record within system

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician reviews the new item record and publishes the record within the system.

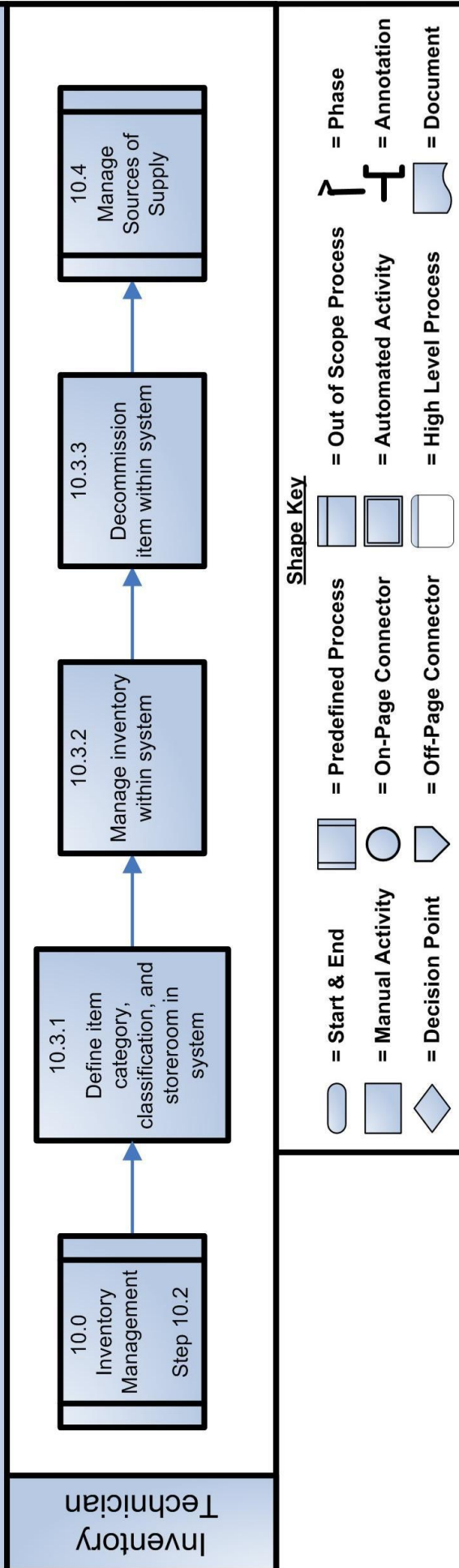
[If 'Yes', proceed to Process 10.0 Inventory Management, Step 10.2.](#)

Advice and Tips

- Websites are used as required for research of materials.

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Operations Support – 10.3 Manage Inventory – Version: 06/16/2010



Operations Support – 10.3 Manage Inventory

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Inventory Technician	• Define item category, classification, and location in warehouse in system • Manage inventory within system • Decommission item within system

Narrative

Process 10.3 – Manage Inventory

Estimated Completion Time: Ongoing

Civil Engineer material assets are maintained within facilities operated by the Material Storage Section. As material is received and distributed, it is up to the Chief of Material Acquisition (CMA) and staff to ensure records are kept accurate and current.

[Entry from Process 10.0 Inventory Management, Step 10.2.](#)

Step 10.3.1 – Define item category, classification, and storeroom in system

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician researches items for correct , classification, location, storeroom, Hazardous Material (HazMat) characteristics, safety, prioritization with regards to mission relevance, minimum re-order quantity, shelf-life, warranty information, lead time, cost information (recent and historical), date of last issue, reorder point, special level items, and residue de-commissioning.

[Proceed to Step 10.3.2.](#)

Step 10.3.2 – Manage inventory within system

Role: Inventory Technician

Estimated Completion Time: 5 days

The Inventory Technician uses Civil Engineer Material Acquisition System (CEMAS) to provide automated inventory control and visibility of assets, identify and correct errors in processing and storage operations, reconcile items, and detail record balances with quantities of stock physically on-hand. A complete inventory of holding, residue, and store materials should be accomplished annually. The Inventory Technician also establishes a minimum stock level for the item by processing AF Form 1996 (Adjusted Stock Level) and ensures inventory of all material is accurate and current. When bills of material become 100 percent material complete, Inventory Management notifies the Shops. This should be accomplished by updating the automated systems tracking and status codes, if available.

[Proceed to Step 10.3.3.](#)

Step 10.3.3 – Decommission item within system

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician decommissions items in CEMAS and ensures items are put into “history” in the event they need to be re-used.

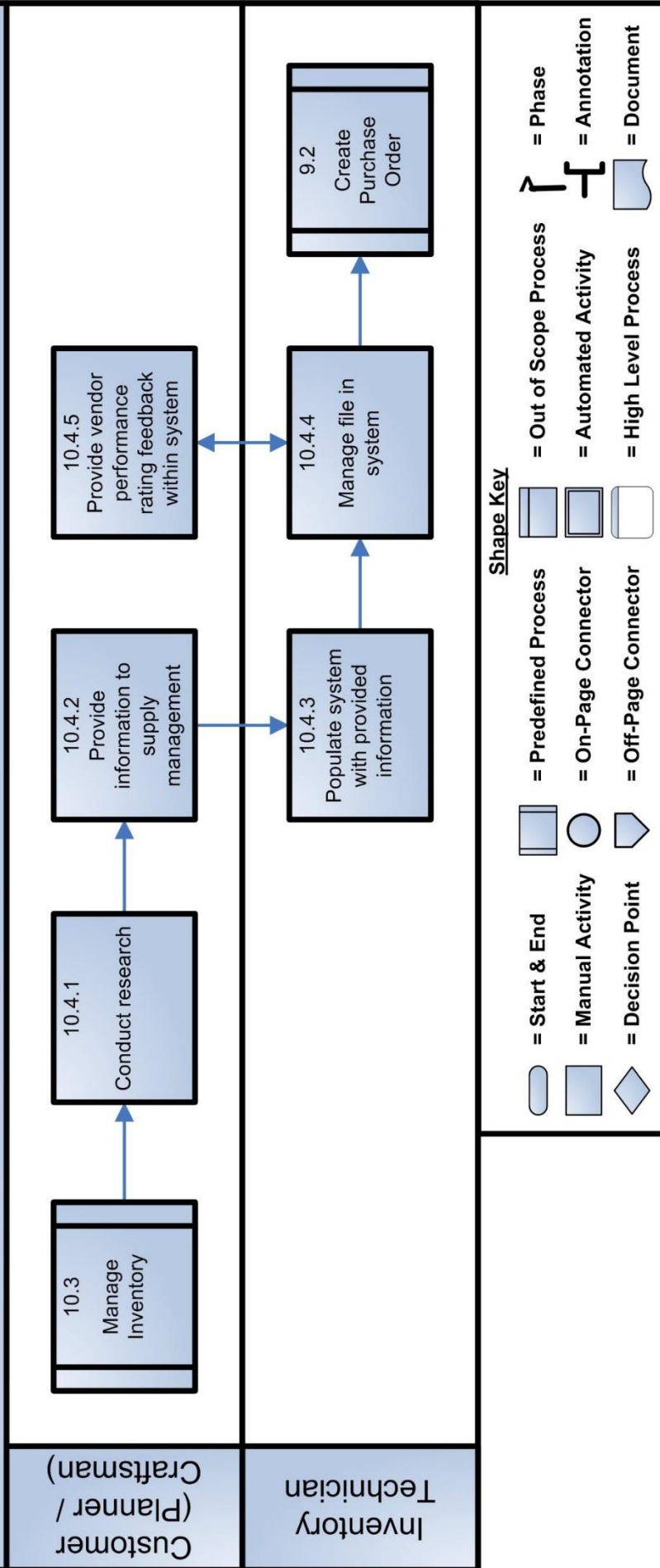
[Proceed to Process 10.4 Manage Sources of Supply.](#)

Advice and Tips

- Technicians should be cautious when decommissioning items as they may be tied to a “Special Level” item which may or may not be apparently clear in the system.
- *** Special Level items are those items/components identified as critical by various Air Force Specialty Codes (AFSCs). Failure of these installed items most always results in service or facility failure.

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Operations Support – 10.4 Manage Sources of Supply – Version: 06/16/2010



Operations Support – 10.4 Manage Sources of Supply

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Customer (Planner / Craftsman)	• Conduct research • Provide information to supply management • Provide vendor performance rating feedback within system
Inventory Technician	• Populate system with provided information • Manage file in system

Narrative

Process 10.4 – Manage Sources of Supply

Estimated Completion Time: N/A

This section is the hub for all material requests, research actions, coordination between customers, supply sources, purchasing actions, data quality, and reject control. Other duties include contractor quality control, accounting and finance transactions, and contracting office actions.

After Shop or Planning personnel build a Bill of Materials (BOM), Inventory Technicians ensure purchases are made according to all regulations and for the lowest cost to the government.

[Entry from Process 10.3 Manage Inventory.](#)

Step 10.4.1 – Conduct research

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 3 days

At times, the Customer will prefer specific brands of materials and may conduct research into cost, performance, and availability to provide to Inventory Technicians.

[Proceed to Step 10.4.2.](#)

Step 10.4.2 – Provide information to supply management

Role: Customer (Planner/Craftsman)

Estimated Completion Time: 1 day

After building the BOM and completing research, if pertinent, the Customer provides information to the Inventory Technician.

[Proceed to Step 10.4.3.](#)

Step 10.4.3– Populate system with provided information

Role: Inventory Technician

Estimated Completion Time: 1 day

The Inventory Technician populates CEMAS with the provided information.

[Proceed to Step 10.4.4.](#)

Step 10.4.4– Manage file in system**Role: Inventory Technician*****Estimated Completion Time: 1 day***

The Inventory Technician manages the file in the system. He / she will add, modify, and / or delete all vendor information and performance analysis, verify the Government Purchasing Card (GPC) is accepted, validate category or commodity, and verify vendor contact information. Once complete, the Inventory Technician proceeds to Process 9.2, Create Purchase Order process to specify vendor, create a purchase order, and add additional information if required.

[Proceed to Step 10.4.5.](#)

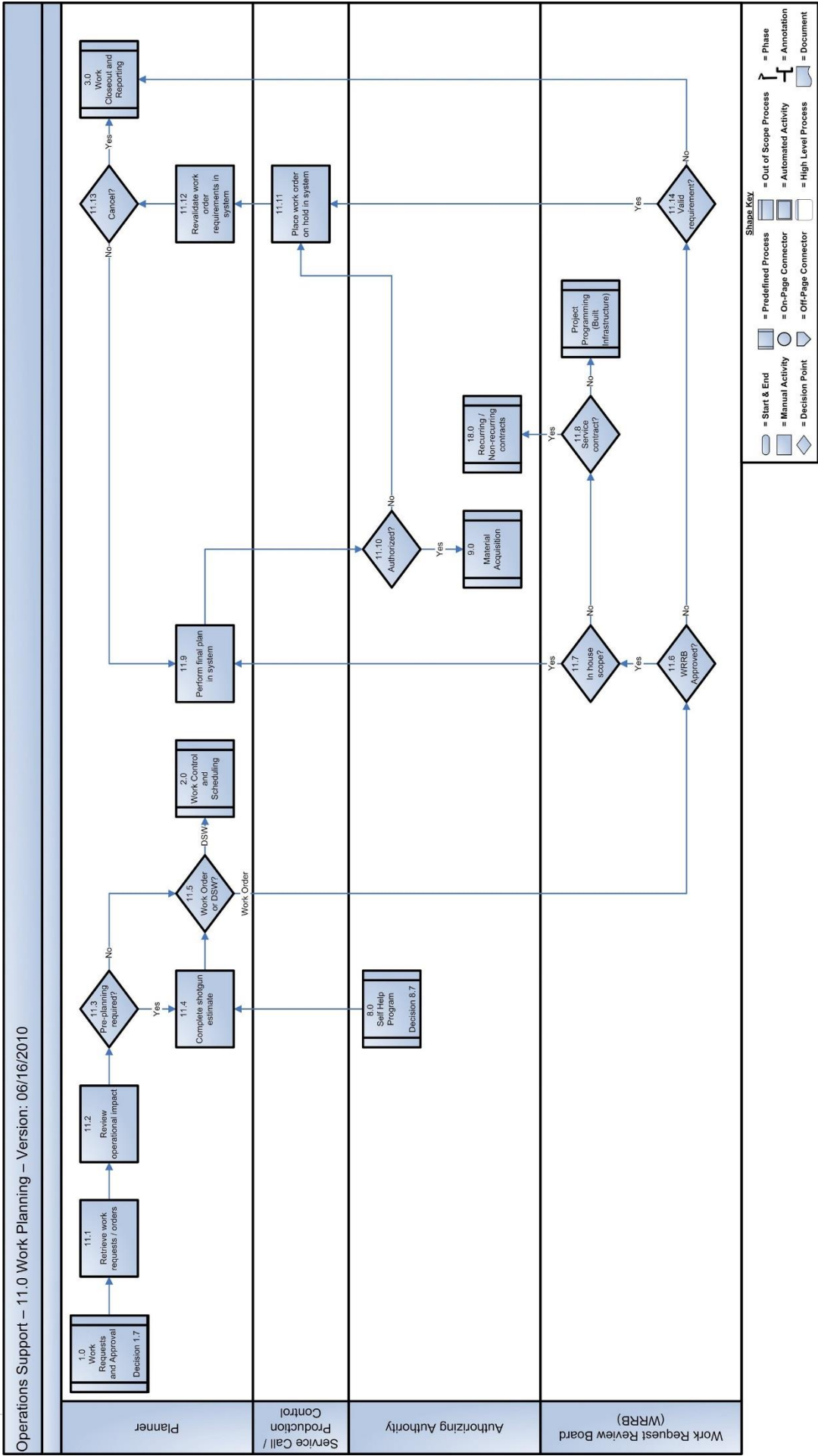
[Proceed to Process 9.2 Create Purchase Order.](#)

Step 10.4.5– Provide vendor performance rating feedback within system**Role: Customer (Planner/Craftsman)*****Estimated Completion Time: 1 day***

The Customer provides vendor performance rating feedback within system.

[Proceed to Step 10.4.4.](#)

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Operations Support – 11.0 Work Planning

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Planner	• Retrieve work requests / orders • Review operational impact and update priority • Determine if pre-planning is required • Complete shotgun estimate • Determine if the request is a work order or Direct Scheduled Work (DSW) • Perform final plan in system • Revalidate work order requirements in system • Decide whether or not to cancel the work order
Service Call / Production Control	• Place work order on hold in the system
Authorizing Authority	• Decide whether or not to authorize the final work order plan
Work Request Review Board (WRRB)	• Decide whether or not the work order gets approved • Determine if the scope of the work order is in house or out of house • Determine if the work order falls under a service contract

Narrative

Process 11.0 – Work Planning

Estimated Completion Time: N/A

The Planning Section closely reviews all work requests to ensure the scope of work described in each request is complete and accurate, and evaluates difficulty, complexity, and cost. This assessment is for approval and it is determined how the work should be accomplished based on Shop capabilities.

[Entry from Process 1.0 Work Requests and Approvals, Decision 1.7.](#)

Step 11.1 – Retrieve work requests / orders

Role: Planner

Estimated Completion Time: N/A

The Planner receives a work request / order from Service Call / Production Control if the work requested is not an emergency and is determined to need additional planning.

[Proceed to Step 11.2.](#)

Step 11.2 – Review operational impact

Role: Planner

Estimated Completion Time: N/A

Once the Planner receives work requests from Service Call / Production Control he reviews the predicted impact of the work and prioritizes the list of work requests / orders.

[Proceed to Decision 11.3.](#)

Decision 11.3 – Pre-planning required?

Role: Planner

Estimated Completion Time: N/A

The Planner will evaluate the scope of the work requested in the work request / order to determine whether or not pre-planning for the work would be required. If the scope of the work is very large or if it would have a large operational impact pre-planning would be required. If the scope is smaller or the work would have a small operational impact pre-planning would not be required.

[If 'Yes', proceed to Step 11.4.](#)

[If 'No', proceed to Decision 11.5.](#)

Step 11.4 – Complete shotgun estimate

Role: Planner

Estimated Completion Time: N/A

[Entry from Process 8.0 Self Help Program, Decision 8.7.](#)

The shotgun estimate will provide the Planner with enough information to begin building the Bill of Materials (BOM). To do this, he/she researches the Civil Engineer Material Acquisition System (CEMAS) to gather required material and associated cost data. If all materials are not in CEMAS, the planner must find them for local procurement. Next, man hours must be determined based on the complexity of the work requested. In rare instances, the work request may not go to planning based on this shotgun estimate.

[Proceed to Decision 11.5.](#)

Decision 11.5 – Work order or DSW?

Role: Planner

Estimated Completion Time: N/A

The Planner determines the scope, complexity, and the amount of time the work order requires as well as its cost. Based on those variables the Planner decides whether Work Request Review Board (WRRB) approval is required. If it is a DSW refer to Process 2.0 Work Control and Scheduling for additional information. If it is a work order the Planner sends the work order to the WRRB for approval.

[If 'DSW', proceed to Process 2.0, Work Control and Scheduling.](#)

[If 'Work Order', proceed to Decision 11.6.](#)

Decision 11.6 – WRRB approved?

Role: WRRB

Estimated Completion Time: N/A

The WRRB decides whether the work order is approved or not based on the required coordination having already been completed and that the proper funding is in place to execute the work order.

[If 'Yes', proceed to Decision 11.7.](#)

[If 'No', proceed to Decision 11.14.](#)

Decision 11.7 – In house scope?

Role: WRRB

Estimated Completion Time: N/A

The WRRB determines whether scope of the work dictates the work be completed in house or not. If not the WRRB determines that the work can be completed in house the work order goes to the Planner to complete the final plan. If the work cannot be completed in house the WRRB determines whether or not it falls into a service contract.

[If 'Yes', proceed to Step 11.9.](#)

[If 'No', proceed to Decision 11.8.](#)

Decision 11.8 – Service contract?

Role: WRRB

Estimated Completion Time: N/A

The WRRB determines if the work order falls into a service contract.

[If 'Yes', proceed to Process 18.0, Recurring / Non-recurring contracts.](#)

[If 'No', proceed to Project Programming \(Built Infrastructure\).](#)

Step 11.9 – Perform final plan in system

Role: Planner

Estimated Completion Time: N/A

The Planner completes the final plan in the system. This plan includes detailed information about labor, work phases, the work plan, and the bill of materials.

[Proceed to Decision 11.10.](#)

Decision 11.10 – Authorized?

Role: Authorizing Authority

Estimated Completion Time: N/A

The Authorizing Authority chooses to either authorize or disapprove the work order based on the final plan in the system. If the work order is authorized, the process continues with material acquisition. If they choose not to authorize the work order, the Planner must go back and place the work order on hold in the system.

[If 'Yes', proceed to Process 9.0 Material Acquisition.](#)

[If 'No', proceed to Step 11.11.](#)

Step 11.11 – Place work order on hold in the system

Role: Service Call / Production Control

Estimated Completion Time: N/A

The Planner sets the status to "On Hold" until the work order can be revised and he must provide reason code. In most cases this is sent back to Service Call / Production Control, but this can be completed by Planning (3E6)

[Proceed to Step 11.12.](#)

Step 11.12 – Revalidate work order requirements in the system

Role: Planner

Estimated Completion Time: N/A

The Planner revalidates the work order requirements in the system annual to help determine whether the work order will be canceled or completed.

[Proceed to Decision 11.13.](#)

Decision 11.13 – Cancel?**Role: Planner****Estimated Completion Time: N/A**

The Planner determines whether or not the work order will be canceled. If the work order is not canceled, the Planner must update the status of the work order in the system. If the work order is to be completed, proceed to the Work Closeout and Reporting

[If 'Yes', proceed to Process 3.0 Work Closeout and Reporting.](#)

[If 'No', proceed to Step. 11.9.](#)

Decision 11.14 – Valid Requirement?**Role: WRRB****Estimated Completion Time: N/A**

The WRRB determines if the requirement is valid. If the requirement is valid, the process continues with Service Call/Production Control placing the work order on hold in the system. If the requirement is not valid, proceed to the Work Closeout and Reporting.

[If 'Yes', proceed to Step 11.11.](#)

[If 'No', proceed to Process 3.0 Work Closeout and Reporting.](#)

Advice and Tips

- There are a few days for work requests coming into Operations. Some examples of this include: work orders going directly to the WRRB through item, work orders that go to Service Call / Production Support first and then to Planning if approved, and work orders going to each group on the base for pre-vetting before it goes to Service Call / Production Control.
- There may be occasions where the volume of work orders requiring final planning is more than a specific planner can complete... Operations may require a priority system in these instances.

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Operations Support – 12.0 Work Clearance Requests

[Roles and Responsibilities](#)

[Narrative](#)

[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Requestor	- Initiate AF Form 103 to include brief work description and drawing - Notify/coordinate with state agency responsible for marking non-government owned systems/utilities (varies from state to state)
Customer Service Production Control	- The Track location of AF Form 103s - Ensure all necessary agency's coordinate as needed - Obtain Operations or Programs Flight Chief signature as final approval - Notify/return form to requestor after approval Base collects lessons learned and best practices from the FCA Teams that perform assessments on its facilities and reports these findings.
Electrical Systems	- Locate and mark all government owned electric utilities in work area - Coordinate on AF Form 103
Water and Fuel Maintenance	- Locate and mark all government owned steam, water, sewer and gas utilities in work area - Coordinate on AF Form 103 - Locate and mark all petroleum, oil, and lubricant lines and tanks associated with petroleum, oil and lubricant in work area
Environmental	- Review work requirement for possible site hazards – occupational compliance (lead based paint/asbestos containing material), construction storm water, or disturbance of existing environmental sites - Coordinate on AF Form 103
Pavement/Grounds	- Locate and mark all irrigation system components in work area - Coordinate on AF Form 103
Fire Protection	- Review work requirements - Brief requirement for open flame permits - If work involves vehicular obstructions, notify Alarm Room to ensure emergency response is not effected - Coordinate on AF Form 103
Security Police	- Review work requirement for possible vehicular obstruction, security alarm compromises, or other security breaches - Coordinate on AF Form 103
Safety	- Review work requirement for possible safety issues - Coordinate on AF Form 103
Communications	- Locate and mark all government owned communication lines (telephone, fiber optic, cable, etc.) and devices in work area - Coordinate on AF Form 103
Base Operations	- Review work requirement for possible interference with Base Operations - Coordinate on AF Form 103
Cable TV	- Locate and mark all non-government owned cable TV lines and devices - Coordinate on AF Form 103
Commercial Utility Company – telephone, gas, electric	Locate and mark all commercially owned utilities. Each company is responsible for marking their respective utility. Utilities should be marked within a set amount of time (varies from state to state)

Narrative

AF Form 103, Base Civil Engineering (BCE) Work Clearance Request (commonly referred to as a “digging permit”) outlines the policy for work clearance requests. The BCE work clearance request is used for any work (contractor or in-house) that may disrupt aircraft or vehicular traffic flow, base utility services, excavations deeper than four inches, protection provided by fire and intrusion alarm system, or routine activities of the installation. AF Form 103 is also to be used prior to the start of any major facility internal renovation work, i.e., plumbing and electrical, communication lines, and Asbestos. This form is used to coordinate the required work with key base activities and keep customer inconvenience to a minimum. It is also used to identify potentially hazardous work conditions in an attempt to prevent accidents. The work clearance request is processed just prior to the start of work. If delays are encountered and the conditions at the job site change (or may have changed) this work clearance request must be reprocessed.

Advice and Tips

- Explain to the contractor the government expectations for protection of utilities and what to do in the event a utility is damaged or an unidentified utility is found.
- Provide a list of contact names and numbers for questions.
- Define the responsibility of the contractor if a utility is damaged.
- Explain to the contractor responsibility for providing physical protection of all open excavations and closed streets.

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Operations Support – 13.0 Design Review Process

[Roles and Responsibilities](#)

[Narrative](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Operations Flight Leadership	• Provide direction and emphasis at squadron and flight level needed to effectively conduct regular reviews
Programs Flight	• Ensure designs and specifications are transmitted to Operations Flight in a timely manner
Planning Section	• Serve as overall point of contact for design review process to include documentation of the process
Shop Foremen	• Review designs and provide written comments as required

Narrative

The Design Review Process provides a mechanism to ensure designs, both contract and in-house, meet appropriate standards for consistency, accessibility, usability, maintainability, compatibility, etc. and can help minimize late-stage changes to requirements or rework once the project is completed / accepted.

Key players in a successful design review process include the Chief / Superintendent, Operations Support Element, other element superintendents, shop Non-Commissioned Officer in Charge (NCOIC) / Foreman, Chief, Programs Flight, and project engineers.

Schedule Project / Work Order Design Reviews

Consider the use of a regularly scheduled meeting time to perform design reviews. Include all crafts in the review and ensure Programs Flight project engineers and Operations Flight work order planner attend to answer project / job specific questions.

Sending Review Materials Out in Advance

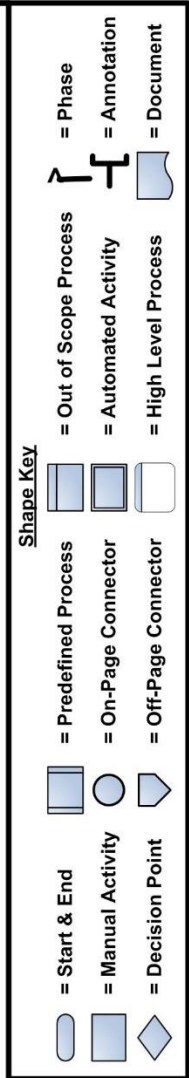
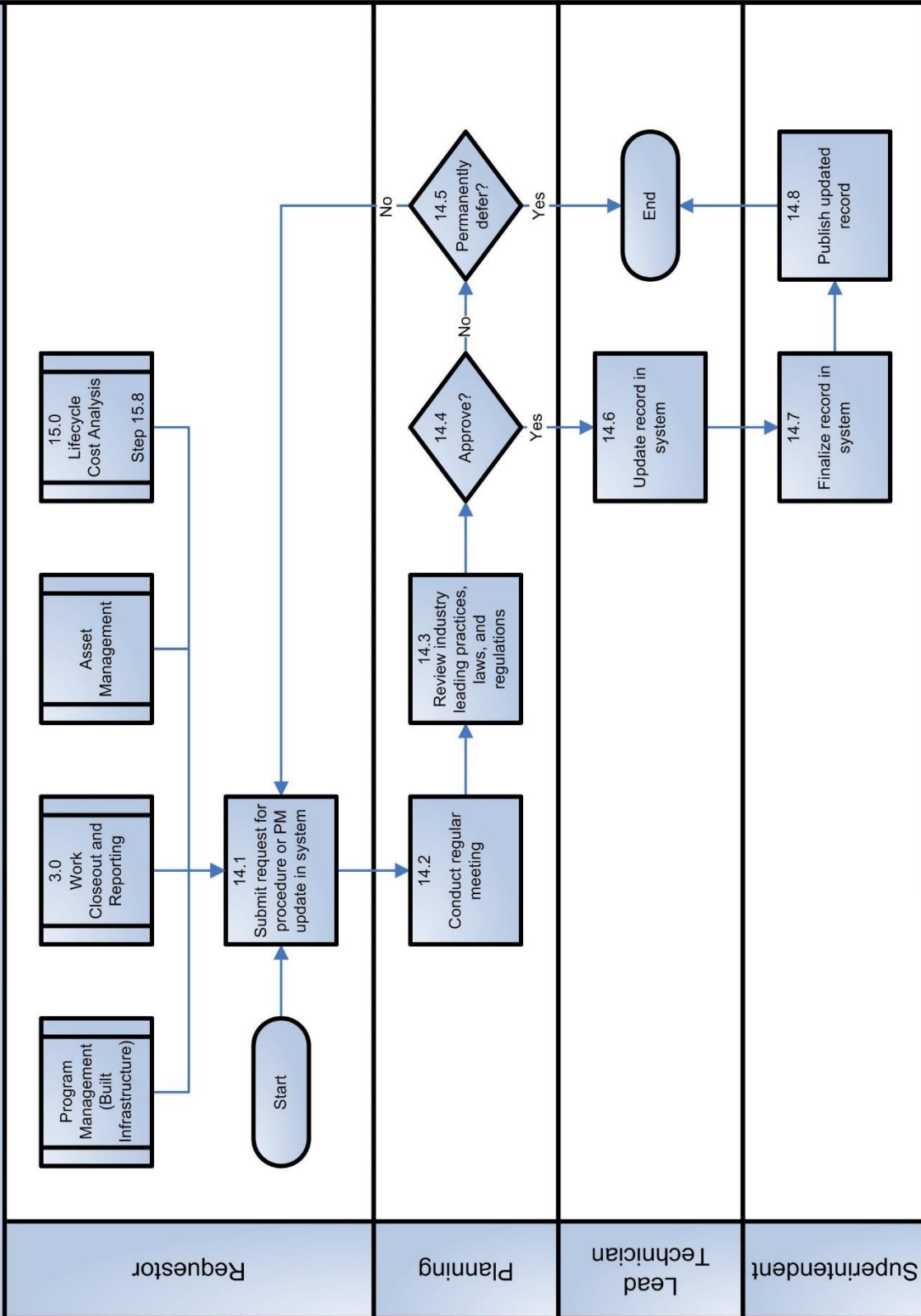
Send materials out in advance of design review meeting to ensure reviewers have sufficient time to evaluate drawings and specifications. Consider the following factors prior to distribution of information:

- How far in advance the review materials need to be made available before the scheduled review meeting (for example, one business day, two business days, one week)
- How materials should be distributed to the reviewers (for example, placed on a web server, sent as e-mail attachments)
- The format materials should use (for example, .doc, .pdf, .html, .jpg, .gif, all of the above)
- A list of related materials that should also be made available (for example, meeting minutes from earlier, related reviews)

Capture Design / Work Order Review Comments in Written Format

Ensure design / work order review comments are captured in written format. Failure to document comments can result in confusion later in the process. For design reviews involving contract projects, recommend comments are transmitted in a manner that enables Programs Flight to document receipt. Formal minutes are not required but can serve as a useful tool to document date, time, attendees, etc. for future reference. Responsibility for overall management of the design review process should reside in the Planning Shop but can reside elsewhere as determined by Operations Flight Leadership.

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Operations Support – 14.0 Recurring Work Program (RWP) Management

[Roles and Responsibilities](#)

[Narrative](#)

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Roles and Responsibilities

ROLES	RESPONSIBILITIES
Requestor	• Submit request for procedure or Preventive Maintenance (PM) update in system
Planning	• Conduct regular meeting • Review industry leading practices, laws, and regulations • Decide whether or not to approve the request • Decide whether or not to permanently defer the request
Lead Technician	• Update record in the system
Superintendent	• Finalize record in the system • Publish updated record

Narrative

Process 14.0 – RWP Management

Estimated Completion Time: N/A

Recurring Work Program (RWP) applies to real property, Real Property Installed Equipment (RPIE), or systems and equipment maintained by the Base Civil Engineer (BCE). RWP consists of operations, recurring maintenance, service work, and other recurring work for which the scope and level of effort are known without an earlier visit to the job site each time the work is scheduled. It includes all recurring work needed to prevent the breakdown of critical facilities, equipment or utilities. RWP encompasses all work of a normally recurring nature except utility operations and contracted services. RWP is managed by reserving hours in the schedule. Professional engineers assigned to Programs Flight along with shop personnel are responsible for the annual assessment of RWP. The establishment of a robust Planning Shop to serve as the Operations Flight focal point is essential to the efficient management of the RWP.

Entry from Program Management (Built Infrastructure).

[Entry from Process 3.0 Material Acquisition.](#)

Entry from Asset Management.

[Entry from Process 15.0 Lifecycle Analysis, Step 15.8.](#)

Step 14.1 – Submit request for procedure or PM update in system

Role: Requestor

Estimated Completion Time: N/A

The Requestor submits a request for new or revised PM procedure update in system. The format used varies depending on the requestor. Inputs to this step come from the Program Flight (Built Infrastructure), the Work closeout and reporting process (Operations Flight), and Asset Management. In the case of the Programs and Asset Management Flights, special emphasis should be placed on the DD Form 1354 coordination process to ensue the Planning Section and/or effected shops load or revise the RWP to account for new equipment or facility upgrades affecting the program. All equipment upgrades/replacements and facility improvement efforts accomplished by the in-house work force or the recurring or non recurring service contract function should also be routed through Planning for inclusion in the RWP.

[Proceed to Step 14.2.](#)

Step 14.2 – Conduct regular meeting

Role: Planning

Estimated Completion Time: 90 days

Planning conducts regular meetings to review all aspects of the RWP request. These meetings are also used to discuss ongoing continuous improvement and upcoming initiatives. Members present at the meeting include Superintendents, Foremen, Lead Technicians, and engineers. Recommend these meetings occur on a quarterly basis but will vary in accordance with base specific criteria.

[Proceed to Step 14.3.](#)

Step 14.3 – Review industry leading practices laws, and regulations

Role: Planning

Estimated Completion Time: 10 days

The group assembled at the Planning meeting review all aspects of the request, including industry leading best practices and applicable laws and regulations. A preliminary Maintenance Action Sheet (MAS) should be developed at this stage to help capture the actual workload associated with the request.

[Proceed to Decision 14.4.](#)

Decision 14.4 – Approve?

Role: Planning

Estimated Completion Time: 1 day

The Planning Committee will decide whether or not to approve the request. The approval decision must balance the workload involved against mission impact and the effect on existing RWP requirements. Very few units have excess man-hours available to add new requirements. In most cases, any increase in RWP will require a corresponding decrease in other workload (RWP, Direct Scheduled Work (DSW), traditional work orders). The Planning Committee is utilized to foster a collaborative decision making process needed to make effective changes to the RWP.

[If 'Yes', proceed to Step 14.6.](#)

[If 'No', proceed to Decision 14.5.](#)

Decision 14.5 – Permanently defer?

Role: Planning

Estimated Completion Time: 1 day

If the Planning Committee decides to deny the request, they determine whether or not the request gets permanently deferred. If it does not get permanently deferred, the requestor must submit an updated request for reconsideration. If permanently deferred Interim Work Information Management System (IWIMS) is updated accordingly to capture the requirement a valid workload that exceeds resources.

[If 'Yes', End.](#)

[If 'No', proceed to Step 14.1.](#)

Step 14.6 – Update record in system

Role: Lead Technician

Estimated Completion Time: N/A

The Lead Technician updates the preliminary MAS record with new procedures based on the recommendation of the Planning Committee to capture the final workload.

[Proceed to Step14.7.](#)

Step 14.7 – Finalize record in system

Role: Requestor

Estimated Completion Time: N/A

The Superintendent reviews and finalizes the updated record prior to publishing it.

[Proceed to Step 14.8.](#)

Step 14.8 – Publish updated record

Role: Requestor

Estimated Completion Time: N/A

The Element Superintendent approves the MAS and the new/revised requirement is loaded in IWIMS. When loading the requirement in IWIMS ensure the workload is properly balanced across the calendar year. A well balanced RWP across the entire calendar year is key to a successful program.

End.

Advice and Tips

- This process begins with the assumption that RWP Management program is in place.
- The Requestor can be anyone.
- The Planning Committee includes the Superintendent, Foreman, Lead Technician, and engineers, selected by need.
- Suggested timelines for the Planning Committee meetings are quarterly or semi-annually.

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Operations Support – 15.0 Lifecycle Cost Analysis

[Roles and Responsibilities](#)

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Roles and Responsibilities

ROLES	RESPONSIBILITIES
Planning	• Provide operations and maintenance data to Operations Support Management
Operations Support Management	• Perform root cause analysis and historical trends • Determine if an opportunity has been identified • Determine if there is an in house solution
Programs	• Provide planned capital improvement data to Operations Support Management
Asset Management (Utilities / Energy)	• Provide Asset Management data to Operations Support Management • Analyze problem and perform business case / Return on Investment (ROI) analysis • Determine if a solution has been identified • Determine what type of solution has been identified
Superintendent / Foreman	• Improve operations / maintenance plans

Narrative

Process 15.0 – Lifecycle Cost Analysis

Estimated Completion Time: N/A

Lifecycle Cost Analysis is a data-driven approach to ensure that all bases are operating at consistent and strong level. The framework for Lifecycle Cost Analysis is rooted in Asset Management; this helps to identify where money is currently being spent and to provide statistical backing for requests for additional spending. The data gathered and analyzed provides insight into predictive replacements of current items on each base as well as insight into the need for more energy efficient buildings and appliances.

Lifecycle Cost Analysis was a key aspect of the legacy maintenance engineering element as it was used as a tool to analyze and optimize the RWP program, comparing “preventive maintenance” versus “breakdown maintenance”. See the attached Lifecycle Cost Analysis document (from the rescinded AFPAM 32-1004 vol 2) for a complete description of this analysis and how it can be applied. The term Lifecycle Cost Analysis as applied for this playbook, however, extends to solutions and improvements for not only Recurring Work Program (RWP) management, but also for data/programs managed out of Programs and Asset Management Flights, respectively.

Step 15.1 – Sources of input

Role: Planning, Programs, Asset Management (Utilities / Energy)

Estimated Completion Time: N/A

Various background data documents are provided to Operations Support Management to complete root cause and trend analysis. The term “Operations Support Management” applies to the military and civilian leadership of the Operations Support section; those individuals will decide how best to perform the overall task of Lifecycle Cost Analysis in their section.

15.1.1 Operations and maintenance data

Role: Planning

Estimated Completion Time: 1-2 days

Planning provides operations and maintenance data to Operations Support Management. This includes Interim Work Information Management System (IWIMS) facility data such as work order and Direct Scheduled

Work (DSW) man-hours, supply costs, etc. Eventually, as we increase our IT capabilities through transformation initiatives (i.e., NEXGEN IT), we will be able to store and analyze more data for operations and maintenance, such as age, condition, lifespan, replacement cost, etc, of our facility, system, and component levels. This will better enable predictive maintenance, asset lifecycle profiling, and maximizing the “right work at the right time” principle.

15.1.2 Planned capital improvement data

Role: Programs

Estimated Completion Time: 1-2 days

Programs provide planned capital improvement data to Operations Support Management. This includes infrastructure project planning (i.e., 5-year infrastructure plans), Sustainment, Restoration, and Modernization (SRM) projects, etc.

15.1.3 Asset Management data

Role: Asset Management (Utilities / Energy)

Estimated Completion Time: 1-2 days

Asset Management (Utilities / Energy) provide asset management data to Operations Support Management. Asset Management data includes utilities, space, and natural infrastructure.

[Proceed to Step 15.2.](#)

Step 15.2 – Perform root cause analysis and historical trends

Role: Operations Support Management

Estimated Completion Time: 2-4 weeks

Operations Support Management utilizes the data collected from Planning, Programs, and Asset Management to perform root cause analysis and to define historical trends. The data needs to be sorted by cost per square foot. Outliers need to be identified so that cause of the problem can be isolated. It is recommended that Operations Support (CEOS) personnel set up a periodic meeting with key Programs Flight (CEP) and Asset Management (CEA) personnel in this process, as steps 15.2 through 15.4 should be a collaboration between CEA, Operations Flight (CEO), and CEP, depending on the type of data being analyzed.

[Proceed to Decision 15.3.](#)

Decision 15.3 – Opportunity identified?

Role: Operations Support Management

Estimated Completion Time: N/A

Operations Support Management determines whether an opportunity has been identified from the analysis of the data. If an opportunity has been identified the scope of the solution must be determined.

[If 'Yes', proceed to Decision 15.4.](#)

If 'No', End.

Decision 15.4 – In house solution?

Role: Operations Support Management

Estimated Completion Time: N/A

Operations Support Management determines whether the scope of the solution falls in house or should be further analyzed for possible capital investment opportunities. If it falls in house, continue with the Work Requests and Approval Process.

[If 'Yes', proceed to Process 1.0 Work Requests and Approval.](#)

[If 'No', proceed to Step 15.5.](#)

Step 15.5 – Analyze problem and perform business case / ROI analysis

Role: Asset Management (Utilities / Energy)

Estimated Completion Time: 1-2 months

Asset Management examines the problem and performs a business case and a ROI analysis.

[Proceed to Decision 15.6.](#)

Decision 15.6 – Solution identified?

Role: Asset Management (Utilities / Energy)

Estimated Completion Time: N/A

Asset Management determines whether or not a solution is identified from the business case and ROI analyses. If there was a solution identified, Asset Management determines what type of solution needs to be implemented.

[If 'Yes', proceed to Decision 15.7.](#)

If 'No', End.

Decision 15.7 – Type of solution?

Role: Asset Management (Utilities / Energy)

Estimated Completion Time: N/A

Asset Management determines whether it the solution(s) required is / are Programs, Asset Management, and / or Operations. It is recommended that a periodic meeting with key CEP, CEA, and CEO personnel is set up to discuss the type of solution.

If 'Programs', proceed to 'Update capital improvement and / or disposal'.

If 'Asset Management', proceed to 'Explore demand management techniques'.

[If 'Operations', proceed to Step 15.8.](#)

Step 15.8 – Improve operations / maintenance plans

Role: Superintendent / Foreman

Estimated Completion Time: 2-4 weeks (but may vary depending on the solution)

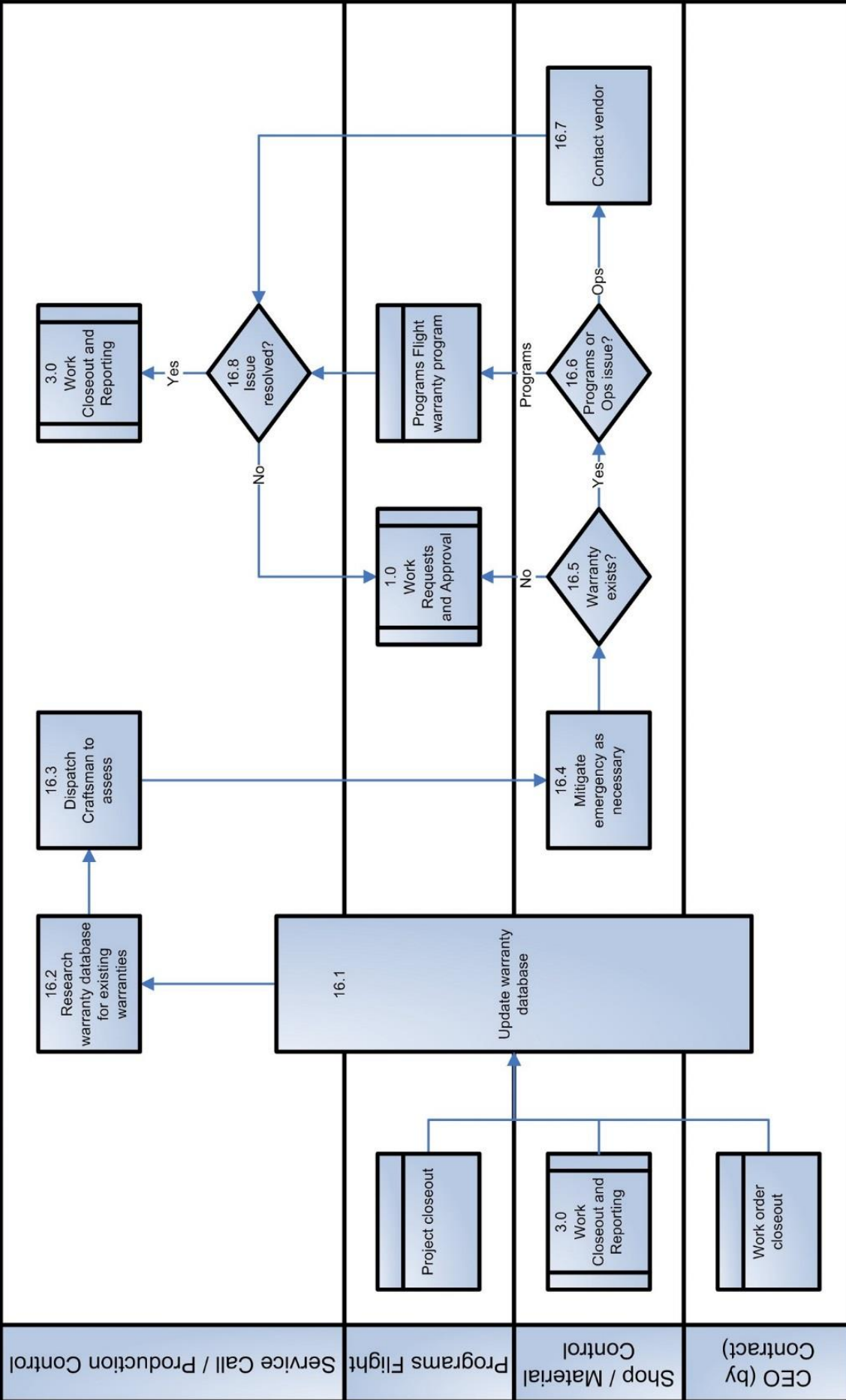
Operations Support Management improves operations / maintenance plans. See the attached RWP document for a discussion on RWP support, and 14.0, RWP Management. If the solution drives an improvement to an aspect of the RWP program, the shop superintendent and foreman need to be involved at that point to implement successfully. If the solution drives a need to open a DSW or work order to solve the problem, then proceed to Process 1.0, Work Requests.

[Proceed to Process 1.0 Work Requests and Approval](#) and [Process 14.0 RWP Management.](#)

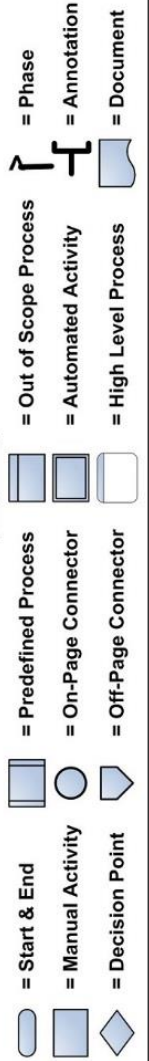
Advice and Tips

- Due to reorganization, the Company Grade Officer (CGO) position that used to be assigned as “Chief, Maintenance Engineering” should now be aligned as “Chief, Operations Support” on the Unit Manning Document (UMD). In addition, there should be a Non-Commissioned Officer in Charge (NCOIC) and / or a civilian position at the Operations Support Management level. These individuals are charged with determining the best way to implement “Lifecycle Cost Analysis” in the Operations Flight, as well as setting up and running periodic meetings with key members of CEA and CEP in order to find solutions for implementation across the squadron.

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Shape Key



Operations Support – 16.0 Warranty / Guarantee Programs

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[Advice and Tips](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Service Call / Production Control	• Update warranty database • Research warranty database for existing warranties • Dispatch Craftsmen to assess • Determine if the issue has been resolved
Programs Flight	• Update warranty database
Shop / Material Control	• Update warranty database • Mitigate emergency as necessary • Determine if an warranty exists • Determine if it is a Programs Flight or Operations Flight issue • Contact vendor
CEO (by Contract)	• Update warranty database

Narrative

Process 16 – Warranty / Guarantee Programs

Estimated Completion Time: N/A

The purpose of this playbook is to document the warranty / guarantee business process and enable stakeholders and involved role players to understand the process, how it is performed and, who is responsible for performing each process step.

An effective, well managed warranty / guarantee program will ensure contractor and manufacturer warranties / guarantees are enforced to the maximum extent possible and eliminates the unnecessary expenditure of civil engineer resources while simultaneously enhancing mission accomplishment.

Entry from Project closeout.

[Entry from Process 3.0 Work Closeout and Reporting.](#)

Entry from Work order closeout.

Step 16.1 – Update warranty database

Role: Service Call / Production Control, Programs Flight, Shop / Material Control, CEO (by Contract)

Estimated Completion Time: NLT 30 days after acceptance

Establish a warranty database with a single point of contact responsible for overall management of the database as a first step. The point of contact can be from any work center is a local decision. Since Interim Work Information Management System (IWIMS) does not contain an automated tool for tracking warranties, the use of a Microsoft Access / Microsoft Excel type software platform is required. As a minimum capture the following data elements: make, model, date installed, warranty start date, warranty expiration date, contractor / vendor, and contractor / vendor contact information. Gather data from Programs Flight during project closeout and from the Operations Flight prior to closing out the work order in IWIMS.

[Proceed to Step 16.2.](#)

Step 16.2 – Research warranty database for existing warranties

Role: Service Call / Production Control
Estimated Completion Time: 1 day

Establish a standard operating procedure for Service Call / Production Control to conduct initial research of the warranty database to check if existing equipment in need of repair is under a manufacturer's warranty. The research should be conducted prior to dispatching a craftsman.

[Proceed to Step 16.3.](#)

Step 16.3 – Dispatch Craftsmen to assess
Role: CEO by Contract
Estimated Completion Time: less than 5 days

Service Call / Production Control dispatch craftsmen to assess the item in need of repair to see if the repair creates an emergency situation.

[Proceed to Step 16.4.](#)

Step 16.4 – Mitigate emergency as necessary
Role: Shop / Material Control
Estimated Completion Time: Within 24 hours

If the item in need of repair creates/causes an emergency situation, craftsman will coordinate with Operations Flight leadership to mitigate the emergency situation. If possible, limit mitigation efforts to solutions that will not affect the warranty e.g., use of portable equipment, bypass damaged equipment, and coordinate temporary relocation of personnel.

[Proceed to Decision 16.5.](#)

Decision 16.5 – Warranty exists?
Role: Shop / Material Control
Estimated Completion Time: N/A

Shop / Material Control determine if the reported problem is the result of the failure of an item covered under an existing warranty. If the needed repair is not covered under the terms on the warranty, i.e. an unrelated component failure, complete the repair using standard procedures covered under Process 1.0 Work Requests and Approval, Decision 16.6. If the reported problem is the result of the failure of an item covered under an existing warranty, proceed to Decision 16.6.

[If 'Yes', proceed to Decision 16.6.](#)

[If 'No', proceed to Process 1.0 Work Requests and Approval.](#)

Decision 16.6 – Programs or Ops issue?
Role: Shop / Material Control
Estimated Completion Time: N/A

Shop / Material Control determine if the issue at hand is the responsibility of the Programs or Operations Flight. If it falls under the Programs Flight, continue to the Programs Flight warranty program. If it is an Operations issue, Shop / Material Control contact the vendor.

[If 'Programs', proceed to Programs Flight warranty program.](#)

[If 'Operations', proceed to Step 16.7.](#)

Step 16.7 – Contact vendor
Role: Shop / Material Control

Estimated Completion Time: 1 day

Shop / Material Control contacts the vendor to resolve the issue with the item in need of repair.

[*Proceed to Decision 16.8.*](#)

Decision 16.8 – Issue resolved?

Role: Service Call / Production Control

Estimated Completion Time: N/A

Service Call / Production Control determine whether or not the issue was resolved. If the issue was resolved proceed with Work Closeout and Reporting. If the issue was not resolved, proceed with Work Requests and Approval.

[*If 'Yes', proceed to Process 3.0 Work Closeout and Reporting.*](#)

[*If 'No', proceed to Process 1.0 Work Requests and Approval.*](#)

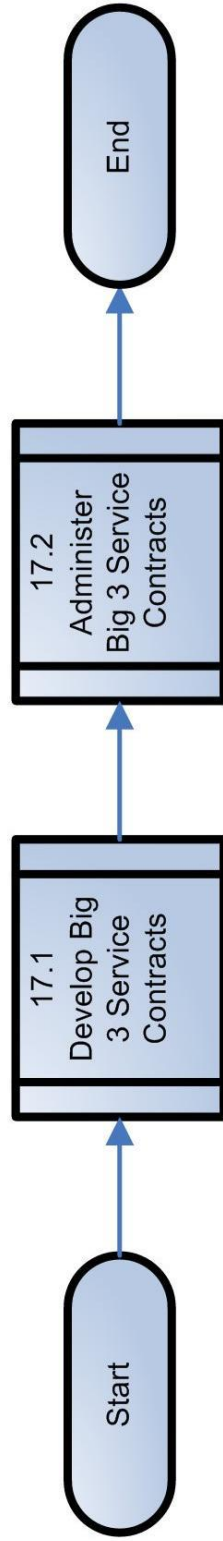
Advice and Tips

- Establish a single point of contact to modify, maintain, and monitor the warranty database. Make database available on a read-only basis to other squadron members.

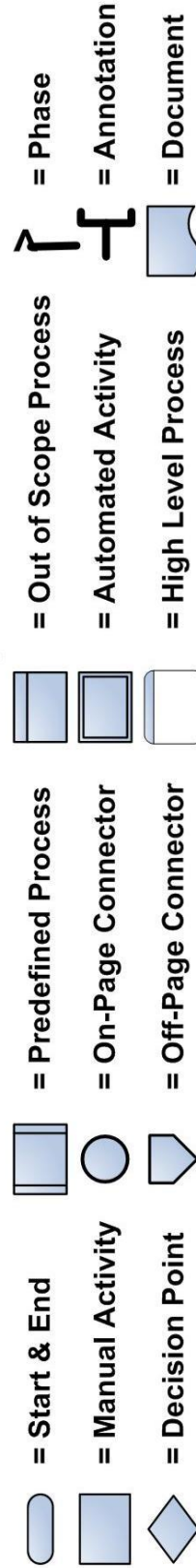
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Operations Support – 17.0 Big 3 Service Contracts – Version: 06/16/2010

Operations
Flight
Management



Shape Key



Operations Support – 17.0 Big 3 Service Contracts

[Roles and Responsibilities](#)

[Narrative](#)

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Operations Flight Management	• Develop Big 3 Service Contracts • Administer Big 3 Service Contracts

Narrative

Process 17.0 – Big 3 Service Contracts

Estimated Completion Time: N/A

Service contracts are defined by the Federal Acquisition Regulation (FAR) 37.101 as a “...contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply.” The sole purpose of the contract is for the contractor to perform some specified quantity of work.

Operations Support is responsible for service contracts. The Quality Assurance Person (QAP) should have the expertise and the training to be the focal point for service contracts. The work centers can also provide specific expertise in monitoring and evaluating the performance of some contracts.

Step 17.1 – Develop Big 3 Service Contracts

Role: Operations Flight Management

Estimated Completion Time: N/A

After the Functional Commander assigns the QAP, the QAP develops the Performance Work Statement (PWS). The QAP creates an estimate and prepares a package for MAJCOM review. If the MAJCOM approves it, the Functional Commander submits the package to Base Contracting to solicit contract. For additional information, see Process 17.1 Develop Big 3 Service Contracts.

[Proceed to Step 17.2.](#)

Step 17.2 – Administer Big 3 Service Contracts

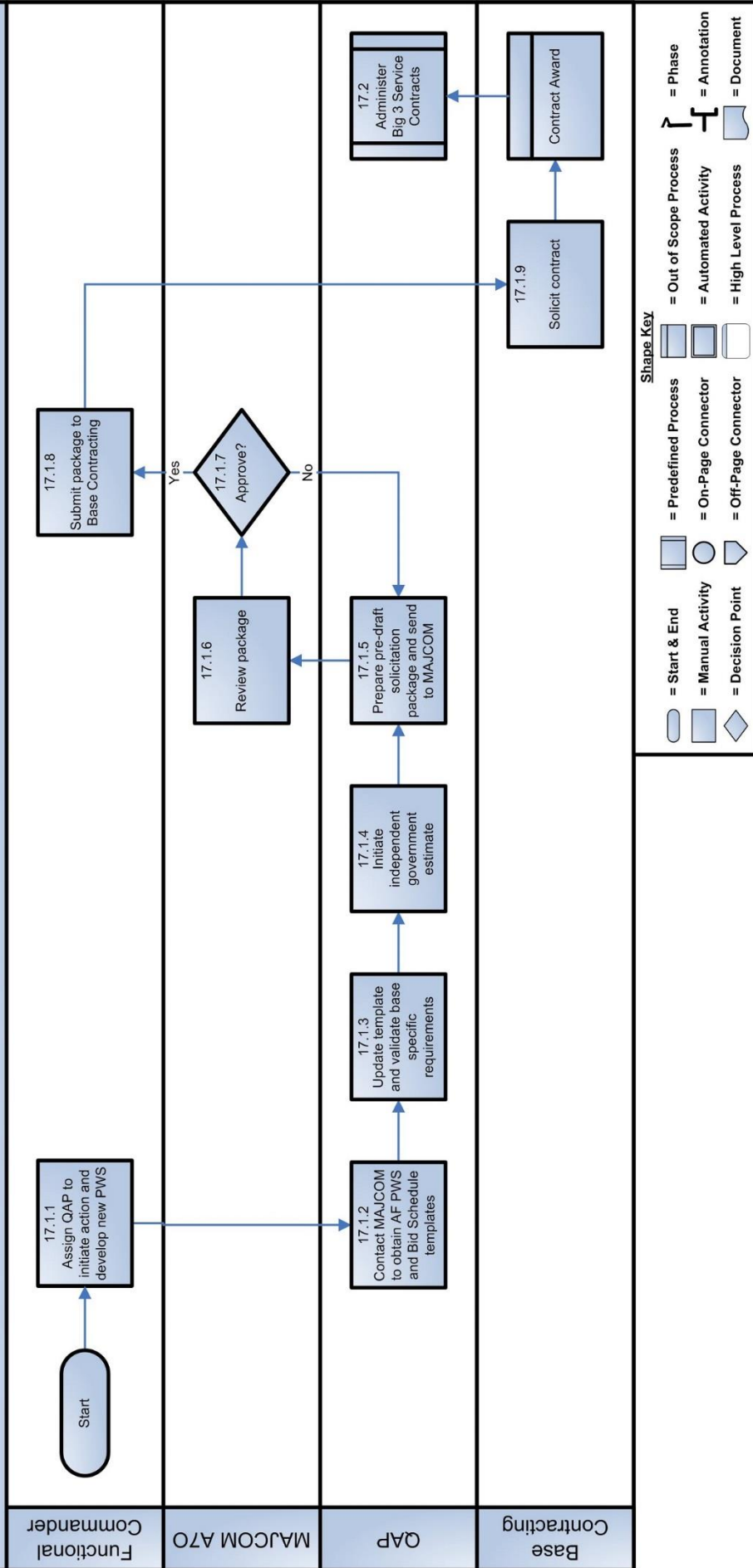
Role: Operations Flight Management

Estimated Completion Time: N/A

The Big 3 Service Contracts consist of base custodial, grounds maintenance, and integrated solid waste management contracts. The Functional Commander must complete his/her training before nominating a QAP. The QAP must complete training before administering the assigned practices. For additional information, see Process 17.2 Administer Big 3 Service Contracts.

End.

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Operations Support – 17.1 Develop Big 3 Service Contracts

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Functional Commander	• Assign Quality Assurance Person (QAP) to initiate action and develop new Performance Work Statement (PWS) • Submit Package to Base Contracting
MAJCOM A7O	• Review package • Determine whether package is reviewed
QAP	• Contact MAJCOM to obtain Air Force PWS and Bid Schedule templates • Update template and validate base specific requirements • Initiate independent government estimate • Prepare pre-draft solicitation package and send to MAJCOM
Base Contracting	• Solicit contract

Narrative

Process 17.1 – Develop Big 3 Service Contracts

Estimated Completion Time: N/A

The Department of the Air Force, Chief of Staff, officially sanctioned the Big 3 Service Contract Standards, by Policy Letter dated 23 May 2008, for Grounds Maintenance Services, Custodial Services and Integrated Solid Waste Management (formerly known as Refuse and Recycling Collection and Disposal). A standardized approach will ensure all Air Force installations receive the same Level of Service (LOS) as funding allows. These standards were carefully developed to meet mission requirements and provide a clean, professional work place while acknowledging the realities of today's fiscal environment.

All Big 3 Service Contract packages to include PWS, Standards, and Bidding Schedules are located on the Civil Engineering Contracting/Competitive Sourcing CoP for viewing. Each MAJCOM will implement the Air Force Standards and ensure bases adhere and comply with this policy.

Step 17.1.1 – Assign QAP to initiate action and develop new PWS

Role: Functional Commander

Estimated Completion Time: 1 day

Once the Functional Commander (FC) has been designated/ assigned, and received training from the Contracting Squadron, he/she will assign a primary and alternate Quality Assurance (QA) personnel for each of the Big 3 Contracts. A standard nomination letter for each QA personnel for primary and alternate duties is required by the Contracting Squadron.

[Proceed to Step 17.1.2.](#)

Step 17.1.2 – Contact MAJCOM to obtain AF PWS and Bid Schedule templates

Role: QAP

Estimated Completion Time: 1 day

Either the FC or primary QA personnel will contact their respective MAJCOM A7O office for the Big 3 Contract Standards, PWS, and Bid Schedule templates for use in development of a new contract solicitation. Since the PWS'

have already been written, accepted, and directed for use by both AF/A7C and SAF/ACQ, the only changes allowed will be in Section 3 and Section 4 as based on specific Base level requirements.

[Proceed to Step 17.1.3.](#)

Step 17.1.3 – Update template and validate base specific requirements

Role: QAP

Estimated Completion Time: 30-45 days

Typically, the Big 3 Service Contracts have been in place for many years and do not require an extensive rewrite for Base specific requirements located in Section 3.0, Government Furnished Property and Services and Section 4.0, General Information. It is incumbent on QA personnel to verify and validate the information is current, acceptable, and accurate in these sections.

In addition, QA personnel will update the respective Appendices and Work Load Estimates as required in each of the specific templates. Custodial Services facility square footage table, Grounds Maintenance Work Load Estimate table, and the Refuse and Recycling Historical Collection Frequency table.

Each of the tables should accurately reflect the square footage being cleaned, the acreage being maintained, and refuse/recycling collection schedule in order to ensure the Air Force is receiving fair and reasonable cost proposals.

[Proceed to Step 17.1.4.](#)

Step 17.1.4 – Initiate independent government estimate

Role: QAP

Estimated Completion Time: 30 days

A detailed Independent Government Estimate (IGE) is required for the specific contract being developed. The IGE should include labor, materials and supplies, and equipment costs. Labor costs should be established in accordance with the Department of Labor (DoL) hourly wage determination and health and welfare (H&W) benefits for the specific contract service employee. DoL Wage Determinations can be obtained from the Contracting Squadron or Wage Determinations online at <http://www.wdol.gov/contracts>. The IGE also needs to address a percentage increase for profit, overhead, General and Administration (G&A). The detailed estimate should be accomplished in accordance with the contract Bid Schedule's Contract Line Items (CLINs) in order to roll up the annual costs, with all costs addressed to include profit/overhead/G&A, for each specific service.

Using last year's contract CLIN pricing and adding 10% is not an acceptable practice for developing an IGE. Using another Base's contract pricing for an IGE is not an acceptable practice.

[Proceed to Step 17.1.5.](#)

Step 17.1.5 – Prepare pre-draft solicitation package and send to MAJCOM

Role: QAP

Estimated Completion Time: 2 days

A completed pre-draft solicitation package consists of a draft PWS, draft Bid Schedule, IGE, and draft Bid Schedule filled in with rolled up IGE costs. This package will be submitted to the appropriate MAJCOM A7O office in accordance with their approval process.

[Proceed to Step 17.1.6.](#)

Step 17.1.6 – Review package

Role: MAJCOM A7O

Estimated Completion Time: 14 days

MAJCOM A7O will review the package for adherence to Air Force Standards. Any and all questions or concerns, required updates, or changes will be addressed and corrected before the Base receives final MAJCOM approval for the contract package to be submitted to the Contracting Squadron.

[Proceed to Decision 17.1.7.](#)

Decision 17.1.7 – Approve?

Role: MAJCOM A7O

Estimated Completion Time: 14 days

MAJCOM A7O provides approval to the Base Civil Engineer (BCE) and Functional Commander to proceed with the contract solicitation process.

[If 'Yes', proceed to Step 17.1.8.](#)

[If 'No', proceed to Step 17.1.5.](#)

Step 17.1.8 – Submit package to Base Contracting

Role: Functional Commander

Estimated Completion Time: 1 day

The Functional Commander will develop a contract package letter to include the approved PWS, Bid Schedules, and IGE and submit to the Contracting Squadron for implementation. In addition, a pre-planning AF Form 9 will also be initiated for the contract that matches the IGE. Typically, the solicitation award process can take approximately 8 months from receipt of the package to contract award. It is imperative for the Functional Commander to understand this required time frame in order to ensure the contract package has been provided in advance for a contract award to coincide with the Fiscal Year (FY) 01 October. Recommend suspense date of contract package submittal to CONS should be before 01 January.

[Proceed to Step 17.1.9.](#)

Step 17.1.9 – Solicit contract

Role: Base Contracting

Estimated Completion Time: 8 months

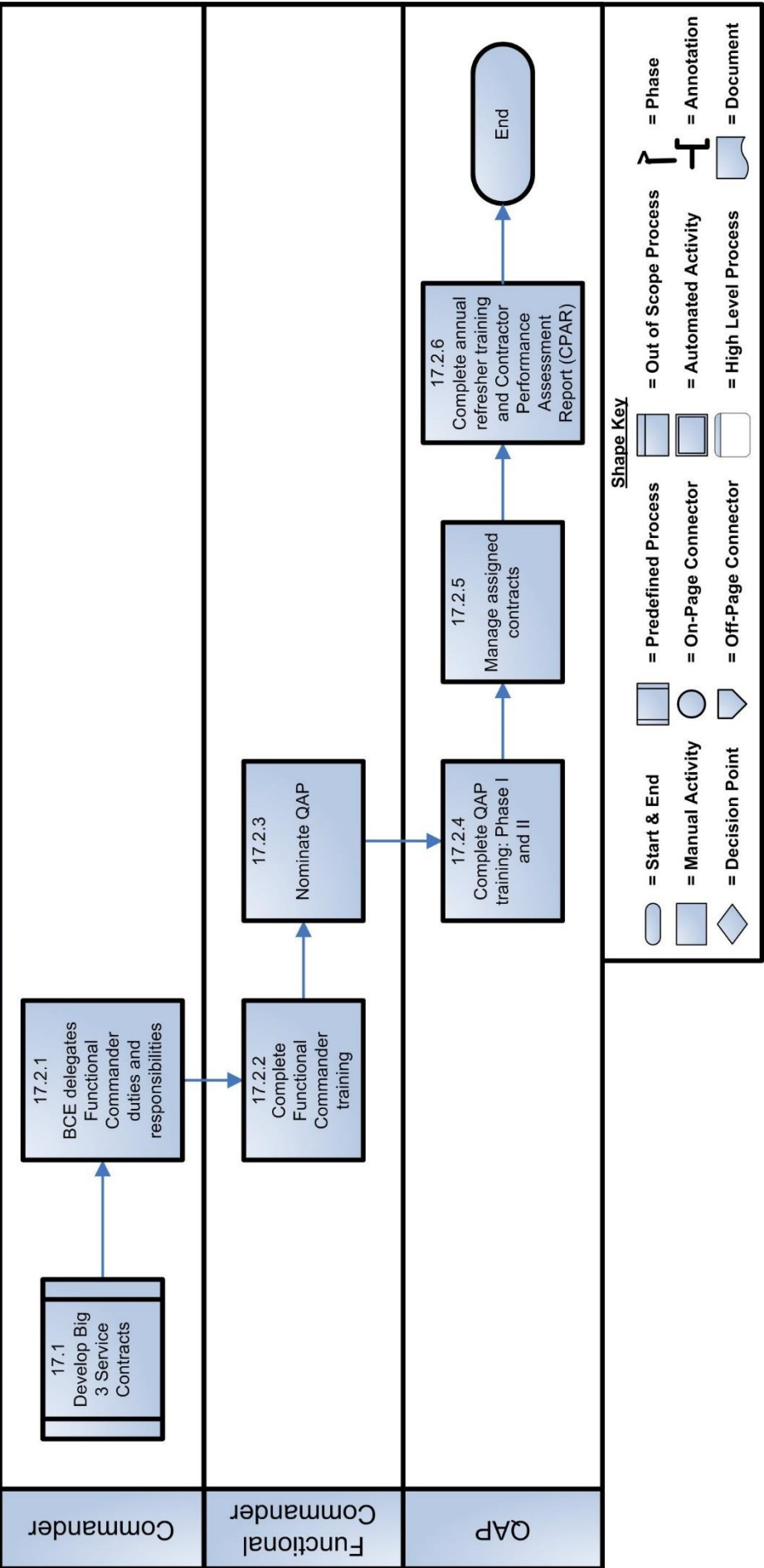
The Big 3 Service Contract solicitation process is time consuming and requires diligence in responding to inquiries and/or requested updates by the Contracting Squadron to the package. The entire process (CONS review, solicitation advertisement, receipt of proposals, proposal evaluations, negotiation if applicable, and contract award) can take anywhere from 6 to 8 months.

Proceed to Contract Award process.

[Then, proceed to Process 17.2 Administer Big 3 Service Contracts.](#)

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Operations Support – 17.2 Administer Big 3 Service Contracts – Version: 06/16/2010



Operations Support – 17.2 Administer Big 3 Service Contracts

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
Commander	Base Civil Engineer (BCE) delegates Functional Commander duties and responsibilities Submit package to Base Contracting
Functional Commander	- Complete Functional Commander training - Nominate QAP
QAP	- Complete QAP training: Phase I and Phase II - Administer assigned contracts - Complete annual refresher training and Contractor Performance Assessment Report (CPAR)

Narrative

Process 17.2 – Administer Big 3 Service Contracts

Estimated Completion Time: N/A

Administration of the Big 3 Service Contracts will typically involve several key stakeholders, usually addressed as the Multi-functional Team, who work as a customer focused group instituted under the authority of base level senior leadership. Their purpose is to create an environment that shapes and executes an acquisition. These members/stakeholders are responsible for the acquisition throughout the life of the requirement. Members include the Contracting Officer (CO), Contracting Administrator, Contracting Quality Assurance Program Coordinator (QAPC), Functional Commander/Director (FC/FD), Quality Assurance (QA) personnel, functional/technical representative, subject matter expert(s) and the contractor who provides the service upon award of the contract. The Civil Engineer Operations Support (CEOS) Service Contract section's mission is to provide motivated individuals to perform a wide variety of duties and responsibilities associated with the Functional Commander, Quality Assurance personnel, and subject matter experts, as required.

[Entry from Process 17.1 Develop Big 3 Service Contracts.](#)

Step 17.2.1 – BCE delegates Functional Commander duties and responsibilities

Role: Commander

Estimated Completion Time: 1 day

In accordance with Air Force Instruction (AFI) 63-124, Performance Based Services Acquisition (PBSA), the Civil Engineer Squadron Commander (CES/CC) is the Functional Commander for Civil Engineering performance based work statements. For the Big 3 Service Contracts, this responsibility should be further delegated to the CEOS section supervisor who should have a working functional/technical knowledge of these contracts. Functional Commander's duties and responsibilities include:

- Assigning primary and alternate QA personnel
- Reviewing contractor performance documentation as prepared by QA personnel regularly, as based on the contract service delivery section to ensure performance is compatible with contract and mission objectives

Usually, the CEOS section will draft an official designation/nomination letter for Functional Commander duties to be signed by the CES/CC and submitted to the Contracting Squadron Commander.

[Proceed to Step 17.2.2.](#)

Step 17.2.2 – Complete Functional Commander training

Role: Functional Commander

Estimated Completion Time: 1 day

Once the Functional Commander has been assigned, in accordance with AFFAR MP5346.103, the Contracting Squadron QAPC will provide training within 30 days of their commencement of duties. This training will be tailored to meet their needs specifically for the Big 3 Service Contracts.

[Proceed to Step 17.2.3.](#)

Step 17.2.3 – Nominate QAP

Role: Functional Commander

Estimated Completion Time: 1 day

The Quality Assurance Person (QAP) is nominated per specific contract. The Functional Commander will draft nomination letters designating specific individuals as either the primary or alternate QA personnel for each specific contract. QA personnel nomination letters are only required for a new contract solicitation award or when QA personnel have changed. Each of the Big 3 Service Contracts will have a primary and alternate QA personnel assigned.

[Proceed to Step 17.2.4.](#)

Step 17.2.4 – Complete QAP training: Phase I and Phase II

Role: QAP

Estimated Completion Time: 2 days

Once primary and alternate QA personnel are assigned to a contract, in accordance with AFFAR MP5346.103, the Contracting Squadron QAPC will provide training on contracting requirements associated with the quality assurance program. QA personnel must receive Phase I and Phase II training prior to contract award and assuming their responsibilities. If nominated to replace an existing QAP after contract award, training will be provided prior to performing performance assessment. Usually Phase I and II training are conducted at different times.

Phase I training will be documented by the QAPC with QA personnel acknowledgement of their requirement to:

- Evaluate and document contractors' performance in accordance with the performance plan
- Notify the contracting officer of any significant performance deficiencies and provide any recommendations to improve the performance plan or Performance Work Statement (PWS)
- Maintain surveillance documentation

In addition, Phase I training also consists of the following:

- PBSA Training
- Review of AFI 63-124
- Relevant examples of performance objectives and performance thresholds
- Ethics/Government-Contractor Relationships

Phase II training is conducted by the Contract Administrator and will consist of the following:

- A detailed discussion of the contract, PWS, and performance plan
- An awareness of any areas in the contract susceptible to fraud, waste, and abuse
- How to properly certify acceptance of services
- Maintenance of and submission of all QA documentation and past performance information required by the contract and applicable regulation

[Proceed to Step 17.2.5.](#)

Step 17.2.5 – Manage assigned contracts

Role: QAP

Estimated Completion Time: 1 day

Managing any one of the Big Service Contracts will most likely be an everyday program. QA personnel will develop inspection schedules, perform scheduled inspections of contract services in accordance with the PWS section 2 Services Summary (SS) and Performance Plan, initiate contractor monthly payments through Wide Area Work Flow

(WAWF), provide the Contracting Squadron results of inspections and handle numerous other activities associated with the contract. Other contract management duties include:

- Planning, programming, and budgeting adequate funds to ensure the execution is within approved funding baseline
- Developing, implementing, and executing performance measurement and management in accordance with the Performance Plan
- Ensuring the contractor understands the unique programs impacting services, e.g., Air Force Hazardous Materials Management Process (HMMP), safety, security, environmental
- Providing support to senior leadership as required (i.e., performance metrics, data, briefings)
- Developing contract modifications and ensuring correspondence and presentations are accurate, timely, and of high quality
- Ensuring contract services do not exceed Air Force Big 3 Contract Service Standards
- Initiating AF Form 9s for contract option period extensions or awards
- Ensuring contract Bid Schedules adhere to Air Force Standards in order to meet Activity Management Plans (AMP) metric data collection and reporting

[Proceed to Step 17.2.6.](#)

Step 17.2.6 – Complete annual refresher training and Contractor Performance Assessment Report (CPAR)

Role: QAP

Estimated Completion Time: 1 day

QA personnel will review, compile all contract inspection documentation, and analyze data in order to complete the annual CPAR, as required. In addition, the Contracting Squadron will provide annual refresher training to ensure QA personnel are up to date with all required contract changes, if necessary.

End.

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Operations Support – 18.0 Recurring and Non-Recurring Contracts

Roles and Responsibilities

Narrative

Roles and Responsibilities

ROLES	RESPONSIBILITIES
CEOS	• Develop contract service requirement package • Develop Independent Government Estimate (IGE) • Obtain and/or secure funding • Inspect and accept contract services, makes payments • Provide documentation of contractor performance • GPC Cardholder
CER	• Process AF Form 9
CONS	• Develop solicitation package for contract award • Award contracted service • Provide training to CEOS personnel for contract management, as appropriate • Monitor and handle contract complaints, work issues, contractor non-compliance based on documentation submitted

Narrative

Introduction

CEOS Service Contract section's mission is to provide expertise in developing, managing, and inspecting a wide range of contracted services in support of the Operations Flight. Typically, in Civil Engineer Squadron (CES) terminology, these contract services are classified as either recurring or non-recurring contracts. All contract services should be established by an approved AF Form 332 Base Civil Engineer (BCE) Work Request and kept in the contract file.

A "service contract" means a contract that directly engages the time and effort of a contractor whose primary purpose is to perform an identifiable task rather than to furnish an end item of supply. A service contract may be either a non-personal or personal contract. It can also cover services performed by either professional or nonprofessional personnel whether on an individual or organizational basis.

"Non-personal services contract" means a contract under which the personnel rendering the services are not subject, either by the contract's terms or by the manner of its administration, to the supervision and control usually prevailing in relationships between the Government and its employees.

Operations Support (CEOS) is not in the business of developing "personal services contracts".

Some of the overarching areas in which a non-personal service contract can be used include: maintenance, overhaul, repair, servicing, rehabilitation, salvage, modernization, or modification of supplies, systems, or equipment, and routine recurring maintenance of real property.

In a recurring services support contract, the quantities of work are known and recur periodically, the contractor is paid periodically, and typically the contract is awarded annually with option year(s).

Most, if not all, recurring contract services at an installation will already be established. A few examples of recurring contract services:

- Automatic Door Operation and Maintenance
- Elevator Certification, Operation and Maintenance
- Floor Lift Certification, Operation and Maintenance
- Hoist/Mobile Crane Certification, Operation and Maintenance
- Grease Trap Cleaning
- Oil Water Separator Cleaning

- Chemical Toilet Rental
- Washer and Dryer Rental/Lease
- Protective Coatings (Painting)
- Carpet and Tile Installation
- Lead Based Paint Abatement
- Asbestos Abatement
- Kitchen Exhaust Hood and Duct Cleaning

In a non-recurring service support contract, the quantities are unique and specific to the time at which they are required; but, otherwise fall under the service contract definition. These services involve payment upon completion of the service and should be contracted individually as required.

A few examples non-recurring contract services:

- Lawn irrigation installation
- Facility landscape renovation
- Facility roof repair
- Facility Heating, Ventilating, and Air Conditioning (HVAC) repair
- Bowling Alley lane resurfacing
- Gymnasium floor resurfacing
- Electric Motor rewind
- Fire extinguisher certification and charging
- BCE Work Order project by contract

Contract Development

The CEOS Service Contract section initiates, develops, and/or re-establishes the work requirement for submission to the Contracting Squadron for implementation. Depending on the work required (construction versus services) and estimated annual cost, those thresholds will determine the terminology and structure for the work requirements package. Typically all contract services requests will require:

- Performance Work Statement (PWS), Statement of Work (SOW), or Construction Specifications
- IGE
- Bidding Schedule
- Performance Period(s) or Completion Date
- Liquidated Damages, if applicable, Letter
- Appropriate Drawings
- Appointment of contract inspector, authorized personnel to issue work orders, as appropriate
- AF Form 9

Contract Award

The CEOS Service Contract section will typically be part of the contract award process and conducts and/or coordinates site visits for potential bidders/vendors. They also participate in the source selection process with Contracting, if applicable. The CEOS Service Contract section provides evaluation of past performance and/or vendor proposal costs.

Contract Management

The CEOS Service Contract section will provide inspection and acceptance of contract services, as required. Contractor payments are accomplished via the methodology as written in the awarded contract. Payment vehicles can be the Government Purchase Card (GPC), or automated DD Form 250 Acceptance of Services - Wide Area Work Flow (WAWF), or possibly signing the SF 1449 Solicitation/Contract/Order for Commercial Items (Purchase Order contract). Periodic performance reports may be required for recurring contract services.

Typical CEOS Contract Service Contract Types

Even though a wide selection of contract types is available to the Government and contractors in order to have flexibility in acquiring a variety and volume of supplies and services required by CES, typically most of the CEOS managed contracts are:

- Fixed Price Contracts - Firm Fixed Price (FFP) Contracts, Government-Wide Purchase Card GPC Contracts, and Purchase Order (AF Form 9) Contracts
- Agreements - Basic Ordering Agreements, Blanket Purchase Agreements (BPAs), and Rental/Lease Agreements
- Indefinite-Delivery Contracts - Indefinite Delivery/Indefinite Quantity (IDIQ) Contracts

Furthermore, in accordance with Federal Acquisition Regulation (FAR) Part 13, Simplified Acquisition Procedures, a GPC is authorized for use in making and/or paying for purchases of supplies, services, or construction. The GPC may be used to make micro-purchases, place a task or delivery order (if authorized in the basic contract, basic ordering agreement, or BPA), or make payments when the contractor agrees to accept payment by the card.

The “Micro-purchase threshold” means \$3,000 except:

- For acquisitions of construction subject to the Davis-Bacon Act, \$2,000
- For acquisitions of services subject to the Service Contract Act, \$2,500

A GPC cardholder in the CEOS Service Contract section may be specifically authorized to make purchases above \$2,500, only from pre-priced government contracts and agreements (e.g., Federal Supply Schedule (FSS), BPA, IDIQ contracts). In this case, authority to use the GPC will not exceed \$25,000 per transaction.

Advice and Tips

- Having a thorough knowledge of the requirement, Contracting Air Force Instructions (AFIs), and the specific FAR parts, both in terminology and requirements, will help in developing contract packages for execution.
- Use CEO shop personnel and/or CEP Program Engineers for service requirement, expertise, and development of the SOW or Contract Specifications.

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