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Manpower and Organization
**DETERMINING MANPOWER
REQUIREMENTS**

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This instruction implements AFD 38-2, Manpower. It prescribes guidance for determining manpower requirements, allocating military grades, managing rated officer positions, documenting contract manpower equivalents, managing civilian positions, and establishing statutory tour requirements. A glossary of references and supporting information is at [Attachment 1](#).

SUMMARY OF REVISIONS

This change incorporates interim change (IC) 2003-2. It updates the Fire Fighter Man-Hour Availability Factor (MAF) in [Table A2.2](#), “Standard Air Force Workweeks and Man-Hour Availability Factors.” A bar (|) indicates revision from the previous edition.

[Table A2.2](#). Replace with the attached updated table.

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Chapter 1

ROLES AND RESPONSIBILITIES

1.1. Objective. The Air Force manpower requirements determination process systematically identifies minimum essential manpower required for the most effective and economical accomplishment of approved missions and functions within organizational and resource constraints. To accomplish this objective, HQ USAF functional managers and HQ USAF/XPM will:

1.1.1. Provide Air Force leaders at all levels the capability to systematically identify minimum essential manpower required for the most effective and economical accomplishment of approved missions and functions within organizational and resource constraints.

1.1.2. Determine, in partnership with Air Force Center for Quality and Management Innovation (AFCQMI), the appropriate Air Force manpower management tool to be developed, consistent with resources needed to develop the manpower standard and the usefulness of the resulting tool.

1.1.3. Strive, in partnership with AFCQMI, to achieve the highest level of Air Force Manpower Standards (AFMS)/variance coverage consistent with effective cost management and available AFMS/variance development resources.

1.1.4. Determine the required mix of military, civilian, or contract services.

1.1.5. Determine the required military category (officer or enlisted) and grade. NOTE: The servicing Civilian Personnel Flight (CPF) or Air Force Personnel Center, Directorate of Civilian Personnel Operations (AFPC/DPC) determines civilian grades based on job content in position descriptions/core personnel documents.

1.2. Air Force Management Engineering Programs (MEP). The MEP provides the framework for developing Air Force Manpower Standards (AFMS), command-unique manpower standards, and providing products and services to Air Force functional managers and manpower managers at all organizational levels. AFMAN 38-208 contains specific procedures and formats for the execution of manpower studies.

1.3. Using MEP Forms. AFMAN 38-208 provides instructions for using MEP forms including automated forms. Do not create a separate automated form when an existing system produces the form. Use approved Air Force general purpose forms (listed in AFI 37-160 Vol. 8, Management Programs “Developing and Processing Forms”) when a management engineering form does not exist. To request a revision or add a new form, consult AFI 37-160 Vol. 8, and send requests to the AFCQMI/MQD, 550 E Street East, Randolph Air Force Base, San Antonio TX, 78150-4451.

1.4. Roles and Responsibilities for Defining Manpower Requirements. The following roles and responsibilities apply at the following levels:

1.4.1. **HQ USAF Functional OPRs will:**

1.4.1.1. Evaluate, review, and assess manpower programs and actions for efficient and effective use of Air Force resources.

1.4.1.2. Coordinate on AFMSs and variances.

1.4.1.3. Consolidate and coordinate on all Air Force-wide variance requests before transmittal to AFCQMI for development.

1.4.1.4. Review currency of AFMSs and manpower determinant tools, initiating the development of new manpower determinant tools as required.

1.4.1.5. Use AFCQMI's approved reengineering and manpower determinant methodologies in developing all manpower determinants (in-house and contracted). Reference AFI 38-208 Vols. I & II.

1.4.1.6. Partner with AFCQMI from initiation to publication of all manpower standard studies (in-house and contracted).

1.4.1.7. Request AFCQMI assistance in conducting manpower standard development studies.

1.4.1.8. Request AFCQMI assistance in developing contract specifications for studies conducted by a sanctioned contractor.

1.4.1.9. Appoint the chairperson of the manpower standards development team.

1.4.1.10. Review new AFMSs for functional accuracy and develop metrics to reflect manpower impact and manpower resource utilization.

1.4.1.11. Develop manpower standards, in partnership with AFCQMI, and coordinate with appropriate Air Staff offices, providing metrics showing impact on functional manpower resources.

1.4.1.12. Coordinate the initiation and publication of all manpower standards with AF/XPM and AFCQMI.

1.4.1.13. Determine and prioritize products and services for Air Force-wide functions consistent with available resources and approved levels of service; validate and defend manpower requirements.

1.4.1.14. Coordinate manpower standards with MAJCOM XPMs and appropriate Air Staff offices.

1.4.1.15. Staff final report through AF/XPM for approval and publishing order. Staff Summary Sheet (SSS) must include a statement that all functions have been reengineered, zero-based, and that no unfunded mandates remain. However, if increases are still required, these will be vetted through the corporate structure for prioritization and funding.

1.4.2. HQ USAF/XPM will :

1.4.2.1. Establish policy and guidelines to determine manpower requirements.

1.4.2.2. Approve all Air Force manpower standards and variances.

1.4.3. MAJCOM, Field Operating Agency (FOA), and Direct Reporting Units (DRU) Chiefs of Manpower and Quality (MQ) will:

1.4.3.1. Manage manpower resources allocated to their commands by HQ USAF in support of approved missions and levels of service.

1.4.3.2. Manage the Command's Commercial Activities, A-76 Program, and Competitive Sourcing and Privatization initiatives.

1.4.3.3. Participate in AF-wide manpower studies, perform mission and functional studies unique to the command, and assist command functional OPRs through management engineering assistance, reengineering, etc., to resolve requirements decisions. Include a statement that manpower requirements are fully funded and that the study levies no unfunded mandates (both within and outside the area studied).

1.4.3.4. Annually review AFMSs in conjunction with command functional managers and submit required changes to the HQ USAF Functional Manager and AFCQMI, in turn.

1.4.3.5. Assist the MAJCOM Functional Manager in the appropriateness of developing manpower standards and variances for unique or smaller functional activities.

1.4.3.6. Support installation MQs through training and timely information on manpower issues impacting their installations.

1.4.3.7. Advise MQs of any AFMSs scheduled to be developed at their installations by AFCQMI or the MAJCOM Quality and Management Innovation Flight/Squadron (QMIF/S).

1.4.4. MAJCOM, FOA, and DRU functional OPRs will:

1.4.4.1. Participate in Air Force-wide manpower studies as required.

1.4.4.2. Annually review currency of command-unique manpower standards and the methodologies used to develop same, initiating revisions to or development of new manpower tools as required.

1.4.4.3. Determine and prioritize products and services for command-unique functions, consistent with available resources and approved levels of service.

1.4.4.4. Appoint the chairperson of the manpower standards development team which is facilitated by a command QMIF/S representative.

1.4.4.5. Request MAJCOM QMIF/S assistance in conducting manpower standard development studies or in developing contract specifications for studies conducted by AFCQMI-sanctioned contractors.

1.4.4.6. Analyze and determine, with the assistance of the MAJCOM QMIF/S, the appropriateness of developing manpower standards and variances for functions under their control.

1.4.4.7. Review functional accuracy and recommend approval of command-unique manpower standards and variances to MAJCOM QMIF/S.

1.4.4.8. Conduct periodic reviews of all changes to AFMSs in conjunction with MAJCOM QMIF/S.

1.4.4.9. Notify local labor unions, through the servicing Civilian Personnel Flight (CPF), of MEP studies at all sites affected by a study.

1.4.4.10. Defend manpower standards.

1.4.4.11. Deleted.

1.4.5. Air Force Center for Quality and Management Innovation (AFCQMI) will:

1.4.5.1. Take the lead as the Air Force agent for manpower studies, determinants, reengineering, and other MEP processes and products.

- 1.4.5.2. Develop, maintain, and provide MAJCOMs, functional OPRs, and the Air Force Corporate Structure, metrics relevant to the level of manpower investment (i.e., consistency, appropriateness, etc.) with which to make budgetary decisions.
- 1.4.5.3. Perform manpower studies to develop and/or update AFMSs for Air Force functional OPRs that apply to more than one MAJCOM or for organizations with no management engineering capability.
- 1.4.5.4. Publish all active duty Air Force Manpower Standards. AGR will publish Air Force Reserve Command and Air National Guard Manpower Standards.
- 1.4.5.5. Provide assistance to Air Force functional OPRs in determining the appropriateness of developing AFMSs and variances.
- 1.4.5.6. Expand their capability, through a contractor work force to perform work resulting in manpower allocation tools for the functional community, when necessary.
- 1.4.5.7. Assist Functional OPRs in accurately defining manpower study specifications, determination, tools, reengineering, modeling and simulation, benchmarking, etc., requirements for developing AFMSs and variances proposed for development by civilian contractors.
- 1.4.5.8. Perform role as technical advisors, and monitor study progress throughout the contract period.
- 1.4.5.9. Notify AF functional OPRs, MAJCOM QMIF/Ss and installation MQs of all programmed, initiated, and finalized reengineering, MEP, and contract manpower studies within their functional area, command, and installation. All installation inbriefs and outbriefs will include the Wing MQ.
- 1.4.5.10. Validate, coordinate with MAJCOM/XPMs, and certify results of new or revised manpower standards and variances before AF/XPM coordinates and approves final package.
- 1.4.5.11. DELETED
- 1.4.5.12. Annually review and process all changes to AFMSs received from MAJCOMs, FOAs, and DRUs.
- 1.4.5.13. Develop MEP tools.
- 1.4.5.14. Develop and maintain metrics to evaluate predictability, accuracy, timeliness, percentage of coverage, and cost to produce Air Force manpower data. Forward information to AF/XPMR at completion of each study effort.
- 1.4.5.15. Collect resource availability information and maintain updated repository of the latest training, tools, and techniques on reengineering, benchmarking, modeling, simulation, activity based costing, etc., and circulate to all MAJCOM QMIF/Ss and installation MQs.
- 1.4.5.16. Provide implementation training on the latest MEP technologies to the Manpower and Quality community.
- 1.4.5.17. In partnership with MAJCOM QMIF/S, support installation MQs by acting as a clearinghouse to provide support on organization reengineering and MEP technologies, and perform the simulation module of base-level modeling efforts as required.
- 1.4.5.18. Provide technical support, i.e., training, programs, funds, etc.

1.4.5.19. Develop the Air Force standard organization reengineering process.

1.4.5.20. Facilitate MEP continuous process improvement (CPI) and provide benchmarking criteria.

1.4.6. Installation Manpower and Quality(MQ) Office will:

1.4.6.1. Verify and validate local product/service tasks, assist functional managers with product/service processes and task improvements, and performance measures (metrics) studies, and function as installation liaison to the MAJCOM XPM and QMIF/S staffs.

1.4.6.2. Provide support to MAJCOM QMIF/Ss and AFCQMI as needed in the development of Air Force Manpower Standards.

1.4.6.3. Assist local customers through management engineering efforts (i.e., reengineering, MEO, activity base costing (ABC), modeling and simulation, benchmarking, process and task improvement and other management studies, etc.).

1.4.6.4. Be the OPR for the Commercial Activities, A-76 Program and Competitive Sourcing and Privatization activities generated at the local level or as levied by MAJCOM/HQ USAF.

1.4.6.5. Assist wing senior leadership in developing and maintaining unit strategic plans.

1.4.6.6. Provide organization structure guidance and support.

1.4.6.7. Apply or reapply AFMSs as directed or required.

1.4.6.8. Review Host-Tenant and Interservice Support Agreements, and Memorandums of Understanding for manpower impact. The manpower data system (MDS) will be updated in accordance with applicable directives.

1.4.6.9. Conduct civilian position management reviews as defined in [Chapter 5](#).

1.4.6.10. Manage military grade rollbacks, military reductions in force, and military-civilian conversions as directed by higher headquarters.

1.4.6.11. Provide wartime support through deployment planning, maintain the wartime computer system, prepare deployment requirements manning documents (DRMDs), participate in stateside Total Force Assessment (TFA) and Overseas Manpower Requirement Review, correlate status of resources and training system data (SORTS), and provide recommendations on the resource augmentation duty (READY) requirement program identification process.

1.4.6.12. Be the Office of Primary Responsibility for all Productivity, IDEA, and Mission Performance Awards Programs for the Installation Commander.

1.4.6.13. Review all manpower action requests to include impact on peacetime and wartime operations, and provide thorough analysis to MAJCOM XPM when issue cannot be resolved at the local level.

Chapter 2

DETERMINING AIR FORCE MANPOWER REQUIREMENTS

2.1. Manpower Determination Process:

2.1.1. AFMS development results from reviewing all available options for mission accomplishment. Determining whether the function is inherently governmental, in whole or in part, is a first step. Second, carefully scrutinize each function and decide if it lends itself to competitive sourcing (i.e., competitive sourcing, OMB Circular A-76 cost comparison, privatization, etc.). Determine which component (active, AGR) is most appropriate when active duty resources are not required. Finally, organizationally reengineer the function including best practices and advanced technologies, etc. The reengineering results are then rolled into an existing AFMS, become a new AFMS, or manpower determinant.

2.1.2. Each AFMS must:

2.1.2.1. Be product/service-oriented

2.1.2.2. Allow for removal, replacement, and, or update of products/services.

2.1.2.3. Identify the core or key products/services.

2.1.2.4. Quantify manpower resources required and the anticipated frequency or workload count for each product/service.

2.1.2.5. Prioritize products/services. Prioritization allows the functional manager to identify tasks to eliminate or streamline.

2.1.2.6. Identify variances to the basic “core” requirement. Location-specific variances identify different types of missions, technology, or environmental issues.

2.1.2.7. Document manpower requirements identified for reinvestment as a result of a Productivity Enhancement Capital Investment (PECI) project with a negative variance. In it include duration of payback period, operational date (projected), and other details in support of the variance. See Air Force Instruction 38-301 for variance preparation and data requirements.

2.1.2.8. Provide flight-specific details (e.g., grades, skills, officer-enlisted-civilian mix).

2.1.3. AFMSs and variances may result in either whole manpower authorization requirements or man-hour requirements. Variances to standards should be developed when the additional workload requirements are not covered by the core manpower standard. However, as with manpower standards, variances are not required to cover every man-hour or position within a function. Generally, use of variances should be limited.

2.1.3.1. In order to streamline the AFMS development process, MAJCOMs will be given 60 days from the Process Oriented Description (POD) release date to submit all variances to AFMIA. Air Force variance workload identified after the 60 day POD release will not be considered during the current AFMS development effort and will be the responsibility of the applicable MAJCOM.

2.1.3.2. Variances are developed when *significant* differences in workload requirements are not covered by the core manpower standard. For consideration, each variance must meet a minimum threshold limit of 25 monthly man-hours.

2.1.3.3. During development of AFMSs, the AFMIA reengineering team, partnering with the responsible functional OPR, will document an average level of service for all core workload. Any MAJCOM that has established a higher level of service than required by Air Force may develop a MAJCOM variance.

2.1.3.4. Variances to an AFMS should not be location specific, but should apply at locations that meet applicability. MAJCOMs will validate applicability.

2.1.3.5. Air Staff will develop metrics to measure the amount of manpower resources being invested by function at base, MAJCOM, and Air Staff. MAJCOMs will develop metrics by function at base and MAJCOM.

2.1.3.6. All MAJCOM/XPMs and respective functional representatives will coordinate on all applicable proposed Air Force variances.

2.1.3.6.1. Air Force variances (directed by Air Force--even if applicable to a single command), submitted within the 60 day time period, will be included as part of the AFMS impact, and be vetted through the Air Force corporate structure for approval of required funding levels.

2.1.3.6.2. Approval and funding of all MAJCOM-directed variances or those variances supporting an increased level of service above the Air Force core workload will be accomplished by the owning MAJCOM.

2.1.3.6.3. Air Force variance workload identified 60 days after POD release will be the responsibility of the owning MAJCOM.

2.1.3.7. Variances as a result of the implementation of a Peci Program will be approved by the MAJCOM (See AFI 38-301, [Chapter 1](#))

2.1.4. Using [Table 2.1](#) as a guide, assign the appropriate Manpower Standards Implementation (MSI) code to every requirement and enter into Manpower Data System (MDS).

2.1.5. Neither manpower determinants nor variances apply to functions retained in-house as a result of an OMB Circular A-76 cost comparison.

2.1.6. Future manpower determination for a Most Efficient Organization (MEO) is determined based on the staffing approach found in the management plan.

Table 2.1. Manpower Standards Implementation (MSI) Codes.

L I N E	A	B
	MSI CODE	DEFINITION
1	*A	Host Tenant Support/Interservice Support Agreements
2	C	Air Force Manpower Standard: Applies to all positions in the core portion of approved Air Force manpower standards. (AFMS)
3	*D	Function underwent A-76 Review: Work center remained in-house and requirements determined as a result of an MEO
4	*E	Position determined by Air Force Reserve Command Manpower Standard.

L I N E	A MSI CODE	B DEFINITION
5	F	Crew Ratio: Positions determined by Air Force crew ratios, to include aircraft, missile, and space systems..
6	*G	Civilian Manpower Equivalent (CME): Requirements outsourced either through cost comparison or direct conversion. Workload performed by contract employees.
7	*H	Administrative Staff: Applies to HQ USAF, MAJCOM, FOA, DRU, NAF, and Centers Staffs. These positions are not determined by manpower standards. Staffs are determined by staffing patterns, directed requirements or external factors.
8	*K	Rescinded AFMS
9	L	Logistics Composite Model (LCOM): Applies to all aircraft maintenance and munitions requirements derived by LCOM simulation. Non-simulated aircraft maintenance and munitions workcenters to include maintenance man-hour/flying hour (MMH/FH) computed workcenters will use the C/M/V/U MSI code where a conventional standard is developed or MMH/FH is used.
10	M	Command-Unique Manpower Standard: Applies to MAJCOM unique mission requirements at one or more locations.
11	*O	Outside the Air Force: Applies to positions outside the Air Force that are not reimbursable. These positions are not determined by AFMSs.
12	P	Pending AF/MAJCOM Manpower Standard or AF/MAJCOM variance(s) development/approval. Use this code for functions and positions that are scheduled for or in the process of development/approval.
13	*Q	Program Flying Training (PFT): Positions determined by approved PFT models.
14	R	Reimbursable: Applies to all positions external to Air Force funding. Includes federal agencies' support in PE 91519F. Do not use this code for positions covered as part of the Transportation Working Capital Fund (TWCF)
15	*S	Staffing Pattern: Applies to workcenters and positions that use a staffing pattern to determine the requirement at wing level and below.
16	*U	MAJCOM variance to an AFMS and/or command-unique standards.
17	V	Air Force approved variance to an AFMS.
18	*W	Position determined by Air National Guard Manpower Standard.
19	*X	Air Force directed requirement at Wing or below.
20	*Y	MAJCOM directed requirement at Wing or below.
21	*Z	Rated and non rated positions wing level and above not covered by an approved manpower standard. These positions require a AF Form 480.

2.2. Man-hour Availability Factors (MAFs). The MAF is the average number of man-hours per month an assigned individual is available to do primary duties. Use a MAF to:

2.2.1. Apply Air Force manpower standards.

2.2.2. Replace with the following: “Compute Air Force Reserve civilian requirements (both technician and non-technician) and use the civilian CONUS MAF.”

2.2.3. Replace with the following: “Develop deployment packages for the Manpower Force Packaging System and wartime military manpower requirements for Air National Guard and Air Force Reserve Command, as directed in the War and Mobilization Plan (WMP). Use the wartime emergency MAF.”

2.2.4. Most manpower standards produce an average monthly man-hour requirement. To convert the man-hour requirement to manpower requirements, divide man-hours by an appropriate MAF.

2.2.5. Available man-hours depend on the amount of assigned time a person is away from his or her primary duty for the following activities: leave, medical, PCS related, organizational duties, education and training, and the like. [Attachment 2 \(Table A2.1. and Table A2.2.\)](#) contains standard, wartime, and special Air Force workweek MAFs for use in AFMS application.

2.2.6. Responsibilities for MAF development, approval, and maintenance follow:

2.2.6.1. Replace with the following: “AFMIA develops and maintains the Peacetime MAFs (normal 40-hour and extended 48-hour workweeks) and Wartime MAFs (emergency 60-hour and surge 72-hour workweeks).”

2.2.6.2. Replace with the following: “HQ USAF/DPM approves peacetime and wartime MAFs.”

2.2.6.3. Replace with the following: “AFMIA reviews peacetime MAFs during even-numbered years and wartime MAFs every three years and updates as required, using the previous year’s data.”

2.2.6.4. Replace with the following: “AFMIA develops and maintains special MAFs (nonstandard workweeks) for functions that cross command lines: e.g., fire protection personnel work a 72-hour workweek. MAJCOMs develop and maintain foreign national civilian and command unique MAFs. AFMIA reviews and comments on all special MAFs. HQ USAF/DPM approves all special MAFs. [Attachment 2 \(Table 2.2.\)](#) contains a list of each approved special MAF and the year it was developed or last updated.”

2.2.6.5. Replace with the following: “AFMIA and MAJCOMs review and update special MAFs as needed, using the previous year’s data.”

2.2.6.6. Replace with the following: “Commands may request consideration of a new workweek. Send requests to AFMIA for review and comment. The request must contain detailed justification for the new workweek and describe the circumstances and nonavailability activity policies for using it. AFMIA will forward recommendations to HQ USAF/DPM for action.”

2.2.6.7. Replace with the following: “HQ USAF/DP provides actual availability data based on continuing analysis of PERSTEMPO issues such as TDY for training. HQ USAF/DPXJ, Readiness and Joint Matters Division, is the Air Staff OPR for PERSTEMPO.”

2.3. Overload Factor. The overload factor ensures effective use of Air Force manpower resources. To earn an additional requirement, Air Force work centers must exceed 30 minutes per day, per manpower requirement, above the normal workday.

2.3.1. Different workweeks have separate overload factors. Use 7.7% for the normal workweek, 4.0% for the extended overseas workweek, and 1.2% for the wartime emergency workweek. No overload factor is applied against the wartime surge work week, firefighter, USAF Academy faculty, and foreign national civilian workweeks.

2.3.2. Use the overload factor for all military requirements during the application of AFMSs. Also use the overload factor for AFMSs with one to six civilians. In flights with more than six civilians, round-up partial civilian manpower requirements of .5 or higher to the next whole number. [Table A2.2.](#) includes specific examples.

2.4. Air Force Manpower Standard (AFMS) Application Procedures:

2.4.1. To derive manpower requirements from AFMSs that determine man-hour requirements, divide the MAF and appropriate overload factor into the total man-hour requirements from the AFMS man-hour computation. If a flight has approved multiple MAFs (e.g., foreign national civilians, US civilians and active duty military personnel), the MAJCOM determines the mix to meet local mission requirements.

2.4.2. Implement manpower requirement changes resulting from application of new AFMSs within 90 days of receipt of implementation instructions. Implementation includes applying the AFMS and coding the manpower requirements with the correct codes to include an effective date of current quarter, plus two fiscal quarters to allow lead time for personnel actions.

2.4.3. Replace with the following: “Fund increased manpower costs resulting from implementation of new AFMSs from existing command resources. Unless otherwise directed by HQ USAF, retain and reinvest manpower authorizations saved from the implementation of AFMSs, PEGI programs, or other product/service task improvements. AFMSs and variances must not contain any unfunded mandates. Steps may include acquiring additional resources via internal MAJCOM realignment or PPBS initiatives, organization reengineering, other methods enhancement initiatives or prioritizing products and services consistent with available resources. Forward all reprogramming of command manpower authorizations and requests for additional manpower resources to HQ USAF/DPM. HQ USAF/DPM will work the requests through the mission and mission support panels (resource allocation teams).”

2.4.4. Replace with the following: “Reapply AFMSs as required by changes in mission or significant base population changes (greater than 100 authorizations). Commands may reapply the standards more frequently as established by the MAJCOM/XPM.”

Table 2.2. Application Instructions for Air Force Manpower Standards Resulting in Man-hours.

STEP	ACTION	EXAMPLE
1	Compute basic AFMS man-hours. Include all variances. Sum the man-hours for the AFMS.	The sum of AFMS 42B1, Vehicle Maintenance, is 7331.49 man-hours. This example assumes an over-seas location.
2	Subtract approved contract manpower equivalent (CME) man-hours from the step 1 sum to determine total in-service man-hours. At a minimum, CMEs should be validated annually and should be current before applying Air Force Manpower Standards.	The total in-service man-hours for Functional Account Code (FAC) 42B1 is 7331.49; this flight has no CMEs.
3	Determine the required military positions (includes military essential positions per AFI 38-204). If all positions must be military, then divide the total man-hours from step 2 by the military MAF times the overload factor. Round up to the next whole number. If all positions are not required to be military, then go to step 4.	<p>ALL MILITARY:</p> $\frac{7331.49}{(149.6 \times 1.077)} = 45.50 = 46 \text{ military}$ <p>Only 26 positions must be military in FAC 42B1; go to step 4.</p>
4	Compute military man-hours. Multiply the military positions determined in step 3 times the appropriate military MAF, then multiply the result by the appropriate overload factor.	26 military X 149.6 (MAF) X 1.077 (40-hour workweek overload factor) = 4189.10 monthly man-hours
5	Compute total civilian man-hours. Subtract man-hours obtained in step 4 from in-service man-hours computed in step 2.	$\begin{array}{r} 7331.49 \text{ Total man-hours} \\ - 4189.10 \text{ Military man-hours} \\ \hline 3142.39 \text{ Total civilian man-hours} \end{array}$
6	Determine the required Foreign National (FN) civilian positions. Convert to FN man-hours by multiplying by the appropriate MAF. Do not use any overload factor for FN civilians.	There must be 8 FN civilian positions in FAC 42B1. The United Kingdom 39-hour workweek MAF is used for this example. $8 \times 143.31 = 1146.48 \text{ FN monthly man-hours}$

S T E P	ACTION	EXAMPLE
7	Compute United States Direct Hire (US-DH) civilian man-hours. Subtract man-hours obtained in step 6 from man-hours obtained in step 5.	$\begin{array}{r} 3142.39 \text{ Total civilian man-hours} \\ - 1146.48 \text{ FN man-hours} \\ \hline 1995.91 \text{ Total USDH civilian man-hours} \end{array}$
8	Determine USDH civilian positions. Go to step 9 if computed man-hours equal or exceed 926.00 (or more than 6 civilian positions) for CONUS locations or 968.65 for overseas locations. Divide by the product of the appropriate USDH civilian MAF and overload factor if computed man-hours are less than the above. Round up to the next whole number.	Computed man-hours exceed 968.65; go to step 9.
9	When USDH civilian man-hours equal or exceed 926.00 for CONUS locations or 968.65 for overseas locations, divide by the appropriate civilian MAF. If the fractional manpower requirement is less than .5, round down to the next whole number. If the fractional manpower is .5 or greater, round up to the next whole number.	$\begin{array}{r} 1995.91 \text{ USDH civilian man-hours} \\ \hline 149.9 \\ \hline = 13.3 = 13 \text{ civilians} \end{array}$
10	Determine total positions. Sum positions obtained in steps 2, 3, 6, and 8 or 9 (as appropriate).	$\begin{array}{r} 26 \text{ Military requirements} \\ 13 \text{ USDH civilian requirements} \\ 8 \text{ FN civilian requirements} \\ \hline 0 \text{ CMEs} \\ \hline 47 \text{ Total requirements} \end{array}$

2.5. Manpower Programming Factors. The Air Staff and commands use Air Force level programming factors to determine manpower requirements and allocate manpower authorizations for specific programming purposes.(see AFI 38-204, Air Force Manpower Programming).

2.6. Maintenance Man-hour Per Flying Hour Requirements Computation. Commands may determine aircraft maintenance manpower requirements using aircraft specific maintenance man-hour per flying hour (MMH/FH) factors when more rigorous methods (i.e., conventional manpower standards or Logistics Composite Model manpower determinants) are not available. Limit MMH/FH requirements

computations to those aircraft whose small numbers or pending departure from the inventory make a more thorough and accurate manpower determination uneconomical. During MMH/FH computations, address the manpower requirements in four segments: productive manning, addenda, additives, and maintenance overhead. Compute each segment separately and then combine to determine the total maintenance manpower requirements.

2.6.1. **Productive Manning.** This segment of the MMH/FH computation determines manpower requirements for all flight line and backshop aircraft maintenance activities. It does not include munitions, aerospace ground equipment (AGE), survival equipment, shop support, transient maintenance, precision measurement equipment laboratories and aircrew training services. Apply the basic MMH/FH formula (see paragraph 2.6.5.) to calculate manpower requirements for productive manning. Base level maintenance functions record productive direct labor hours for each specific weapon system in the core automated maintenance system (CAMS). These man-hours include maintenance on airframes, engines, and other major components. Maintenance uses standard reporting designator (SRD) codes contained in TO 00-20-2, Maintenance Data Documentation (MDD), for airframes by mission, design, and series. Use these SRD codes to accumulate MMH/FH data when developing or updating MMH/FH factors.

2.6.2. **Addenda.** This segment of the MMH/FH computation determines manpower requirements for those elements of maintenance work which cannot be identified with a specific aircraft: AGE, survival equipment, and shop support maintenance. Determine addenda manpower requirements by applying the AGE and survival equipment AFMSs and then adding a 4 percent factor of the total manpower earned in the productive manning segment for shop support. If either one of these AFMSs (AGE or survival equipment) is not applicable, determine addenda manpower requirements by applying a 15 percent factor to the productive manning segment. Also consider the following information when determining addenda manpower requirements:

2.6.2.1. **AGE.** The addenda segment for AGE has always included credit for non-powered AGE. The 60-40 factor is not appropriate for AGE requirements (i.e. not more than 40 percent of repair workload may be contracted to non-Federal Government personnel).

2.6.2.2. **Survival Equipment.** Maintenance of survival equipment includes repair of flight clothing, rubber products, and parachute equipment.

2.6.2.3. **Shop Support.** The addenda segment for shop support addresses work performed on items withdrawn from supply (excluding engines) not related to an aircraft or other end pieces of equipment such as AGE, trainers and non-aerospace equipment. Shop support includes items received from non-aircraft maintenance activities. Shop support man-hours are identified in the MDD system under SRD codes RSA, RSB, RSC, RSD, and RSQ (see Reliability Maintainability Information Systems, SRD Table). Shop support does not include man-hours expended in the survival equipment work center.

2.6.3. **Additives.** This segment of the MMH/FH computation determines manpower required for munitions maintenance and maintenance of specialized equipment (e.g., electronic counter measures [ECM] pods, mission crew capsules for the EC-130) required by the aircraft for mission performance.

2.6.4. **Maintenance Overhead.** The maintenance overhead segment of the MMH/FH computation determines manpower requirements for all activities related to managing aircraft maintenance staff support activities in the Operations and Logistics Groups. When applicable, use Air Force manpower standards to determine the aircraft maintenance overhead manpower requirements. When standards

are not available, apply a 10 percent factor to the sum of the manpower earned in productive manning, addenda, and additive segments.

2.6.5. Example MMH/FH Computations. **Table 2.3.** shows example calculations using the MMH/FH requirements determination method.

Table 2.3. Maintenance Man-hour Per Flying Hour (MMH/FH) Calculation Examples.

A	B	C	D
Category	MMH/FH Formula	No Applicable Standards	Applicable Standards
Productive Manning:	FH* x MMH/FH Factor x PAA 60% x MAF**	1492	1492
Addenda:	AGE/Surv/Shop Support - 15% Age Standard	224 N/A	N/A 125
	Survival Equipment	N/A	20
	Standard Shop Support - 4%	N/A	60
Additives:	(Munitions, ECM Pods, etc.)	<u>55</u>	<u>55</u>
Subtotal:		1771	1752
Maintenance	10%	177	N/A
Overhead:	Manpower Standards	<u>N/A</u>	<u>180</u>
Total		1948	1932

LEGEND:

*Flying hours per month per primary aircraft inventory (PAI)

** Man-hour Availability Factor

2.7. Logistics Composite Model (LCOM).

2.7.1. LCOM is a dynamic computer simulation model that evaluates the interaction between operations and logistics. It is officially registered as the Automatic Data Processing System-14 (ADPS-14) and is the Air Force standard model for all aircraft simulation modeling to include evolving weapons systems. All DoD agencies, MAJCOM activities and contractors requesting and using LCOM must comply with the policies and procedures set forth in this instruction. The model is:

2.7.1.1. Capable of simulating aircraft flying operations, occurrence of malfunctions, accomplishment of repair and servicing tasks, and interaction of personnel resource availability according to shift policies.

2.7.1.2. Designated as a Class I model through the Air Force Verification, Validation, & Accreditation (VV & A) process.

2.7.1.3. Capable of extracting other sister services maintenance data for model simulation.

2.7.2. HQ USAF Deputy Chief of Staff, Plans and Programs (HQ USAF/XP):

2.7.2.1. Serves as the Air Staff OPR for LCOM.

2.7.2.2. Acts as the focal point for coordinating and processing LCOM manpower study documents through Air Staff functional authorities.

2.7.2.3. Approves the LCOM Requirements Board (LRB) Charter and delegates to HQ USAF/XPMR designation of the chairperson.

2.7.2.4. Designates AFCQMI/CC as the program manager (PM) for LCOM.

2.7.3. AFCQMI/CC is:

2.7.3.1. Responsible for program management and configuration of the LCOM model.

2.7.3.2. Establishes procedures for production of software and maintainability.

2.7.3.3. Publishes LCOM procedural regulations, manuals and guides.

2.7.3.4. Maintains, modifies, documents, distributes and implements the standard LCOM system.

2.7.3.5. Reviews change request for LCOM system problems, evaluates impact, informs the requester of planned action, and makes applicable change.

2.7.3.6. Reviews program modification request. Prepares recommendation and submits modification to the LRB for discussion and decision. The LRB approves, disapproves, or tables modification and returns to AFCQMI/CC for action.

2.7.3.7. Maintains a schedule of software development activities.

2.7.4. LCOM Requirements Board (LRB). The LRB acts as a review authority for modifications to the LCOM model. The modification request will be sent to the LRB through AFCQMI/CC. The LRB is established for the primary purpose to:

2.7.4.1. Review, approve or disapprove, and prioritize current and new functional requirements for management of the LCOM ADPS-14 by PM.

2.7.4.2. Provide a forum for exchanging information to get maximum benefit from LCOM.

2.7.4.3. Promote improved operational effectiveness through information exchange.

2.7.4.4. Review the status of LCOM related projects for LRB action items.

2.7.5. LRB Participation: The PM participates as an advisor to the LRB. Voting members are stated in the LRB Charter. New members to the LRB require chairperson approval. The chairperson has authority to invite observers to attend meetings and participate in LRB functions. Voting members should notify and receive chairperson approval prior to inviting outside guest. Any agency or activity using the LCOM model may participate as a member of the LRB.

2.7.6. LCOM Budget: AFCQMI/CC is responsible for budgeting for the operation of LCOM. LCOM users will be responsible for budgeting for any expense associated with their use of LCOM.

2.8. Documenting Unfunded Manpower Requirements

2.8.1. Unfunded manpower requirements must be documented in order to quantify total Air Force manpower needs. The goal of the reengineering effort as documented in the Annual Planning and Programming Guidance is to eliminate unfunded requirements. However, an environment that is constrained both fiscally and by recruiting/retention will result in unfunded requirements that must be documented in MDS.

2.8.2. All Program Objective Memorandum/Budget Estimate Submission initiatives with manpower requirements will be submitted to the Air Force Corporate structure-- with specific MDS coding.

2.8.3. Sources for validated unfunded manpower requirements include:

2.8.3.1. Required but unfunded manpower levels based on the application of approved manpower determinants including traditional manpower standards, and LCOM studies.

2.8.3.2. Required but unfunded aircrew requirements based on approved aircrew ratios applied to authorized primary aircraft inventory force structure levels.

2.8.3.3. Manpower requirements for Program Objective Memorandum/Budget Estimate Tab P initiatives with an effective date two years or less from the date of notification that were considered but not funded by the Air Force Corporate Board. These requirements will use an MSI code "1" to highlight Air Force Corporate Board (Tab P) unfunded requirements.

2.8.4. MDS specific coding for POM initiative submission include the following attributes: EFF, TRU, PEC, CAT, PAS, FAC, OSC, AFSC, API*, GRD, MSI, FCT, CEC*, EMP*. (* where applicable) After the implementation of the new HAF-MDS, the list will include IGCA, AEF and RIC.

2.8.5. AF/XPMP will advise the MAJCOM/XPMs of the manpower CCNs considered but not funded by the Air Force Corporate Board.

2.8.6. An annual revalidation of all unfunded requirements must be accomplished and updated in MDS no later than 31 Oct of each fiscal year. Any requirement not funded after two budget cycles will be removed.

Chapter 3

MILITARY GRADES

3.1. Why We Allocate Air Force Military Grades:

- 3.1.1. Military positions required to accomplish Air Force missions are identified by grade and skill using the manpower determination process.
- 3.1.2. Congressional ceilings constrain the number of active duty general officers, field grade officers, and noncommissioned officers in the grades of senior master sergeant and chief master sergeant. The DoD Authorization Bill defines the maximum number of officers and enlisted authorizations.
- 3.1.3. The Air Force considers enlisted skill level, rather than grade, as the prime indicator of what is required to do the job. Therefore, the integrity of stated skill level requirements must be maintained when implementing enlisted grade adjustments.
- 3.1.4. The Manpower Data System (MDS) documents required and authorized grades for all military manpower requirements. The required grade data field of the MDS states unconstrained required grades to accomplish specific workloads. Authorized grades in the MDS reflect fiscal reality and define grades allowed by applying allocated grade factors to the budgeted end strength.

3.2. Responsibilities for Grades Allocation:

- 3.2.1. Air Force Director of Manpower, Organization and Quality (HQ USAF/XPM):
 - 3.2.1.1. Provides overall planning and policy guidance.
 - 3.2.1.2. Approves fixed grade allocations.
 - 3.2.1.3. Approves officer and enlisted grade allocations.
- 3.2.2. Manpower Requirements Division (HQ USAF/XPMR):
 - 3.2.2.1. Obtains budgeted end strengths, statutory grade ceilings, and general officer positions.
 - 3.2.2.2. Validates colonel positions.
 - 3.2.2.3. Identifies fixed positions.
 - 3.2.2.4. Assists functional OPRs with enlisted career progression group (CPG) review.
 - 3.2.2.5. Provides final grade factors to MAJCOMs, FOAs, and DRUs.
 - 3.2.2.6. Monitors commands for compliance with grade factors.
- 3.2.3. Air Force Center for Quality and Management Innovation (AFCQMI):
 - 3.2.3.1. Defines and describes data system requirements to support the grades allocation process.
 - 3.2.3.2. Provides systems analysis, programming support, and data processing support for developing and maintaining grades management computer programs.
 - 3.2.3.3. Analyzes and evaluates results.
 - 3.2.3.4. Prepares final grade factors for command allocations.

3.2.4. Air Force Personnel Center (AFPC). Provides historical student, transient, and personnel holdee data by grade for officers and enlisted.

3.2.5. Air Staff Functional Managers. Review enlisted CPG allocations, prior to development of final grade factors, for unique requirements and self-sustaining structures.

3.2.6. MAJCOMs, FOAs, and DRUs. Ensure required grades data in the MDS reflects accurate command grade requirements, and implement new fiscal year grade allocations within time constraints levied by HQ USAF/XP. Command totals will not exceed grade levels allocated.

3.3. Grades Allocation Process. The following procedures are used to allocate military grades to MAJCOMs, FOAs, and DRUs for active duty military forces (in File Part A of MDS) on a biennial basis.

3.3.1. Determine Air Force Grade Ceilings. For officers, use the Defense Officer Personnel Management Act (DOPMA) to determine the number of colonel, lieutenant colonel, and major grades. Extrapolate ceilings for field grades, based on funded officer end strength for the allocation years, from the appropriate table in DOPMA. Because there is no specific ceiling outlined in DOPMA for company grade officers, captain and lieutenant grade allocations approximate the projected personnel inventory for the allocation years. By law, chief master sergeant and senior master sergeant grades are constrained to three percent of the total budgeted end strength for the enlisted force, of which no more than one percent may be chief master sergeant. Apply these percentages to funded enlisted end strength for the allocation years. Allocate the remaining enlisted grades based on the Air Force Enlisted Grades Plan.

3.3.1.1. Exclude the following from the process:

3.3.1.1.1. Active Guard/Reserve Positions (Functional Categories X, U, V, Y)

3.3.1.1.2. Medical Corps (MC) and Dental Corps (DC) Positions (AFSCs 44XX, 45XX, 47XX, 40C0C, 40C0D, and 48XX)

3.3.2. Subtract Student/Transient/Personnel Holdee (Patients, Prisoners, and Separatees) grades from Air Force grade ceilings. HQ USAF withholds and does not allocate non-permanent party students (carried in File Part D of MDS), transients, and personnel holdees to the commands. The Air Force Personnel Center (AFPC) provides historical data for withheld grades.

3.3.3. Subtract fixed grades, approved and provided by HQ USAF/XPM, from the total grades available. The following categories are fixed at the authorized grade in the MDS:

3.3.3.1. General Officer positions.

3.3.3.2. Colonel positions.

3.3.3.3. Outside the Air Force positions.

3.3.3.4. Reimbursable positions.

3.3.3.5. Miscellaneous fixed positions (functions or units with unique mission requirements approved by HQ USAF/XPMR).

3.3.4. Distribute remaining grades. Use a "fair share" percentage of funded grade requirements.

3.3.5. Allocate Grade Factors to HQ USAF, MAJCOMs, FOAs, and DRUs. HQ USAF/XP provides command grade factors derived from the sum of fixed and fair share grades for all officer and enlisted

positions. Grades for enlisted positions are allocated by Career Progression Group (first three digits of the Air Force Specialty Code).

3.4. Grade Changes. Submit requests for changes in grade factors to HQ USAF/XPMR.

Chapter 4

COLONEL POSITIONS

4.1. Why We Manage Colonel Positions. Colonel positions are a critical resource and are managed within congressional ceiling constraints. This chapter addresses the management of only those colonel positions that are accountable under the Defense Officer Personnel Management Act (DOPMA). It does not include medical corps (MC), dental corps (DC), or AGR colonels.

4.2. Responsibilities for Managing Colonel Positions.

4.2.1. HQ USAF/XPM:

- 4.2.1.1. Establishes and administers Air Force policy governing identification, evaluation, and validation of colonel requirements.
- 4.2.1.2. Establishes criteria for use in assessing colonel requirements.
- 4.2.1.3. Validates and allocates colonel positions to commands.
- 4.2.1.4. Conducts annual review of colonel requirements.
- 4.2.1.5. Monitors command compliance to allocated positions.

4.2.2. HQ USAF, MAJCOM, FOA, and DRU XPs:

- 4.2.2.1. Submit requests for colonel positions to HQ USAF/XPM in accordance with paragraph **4.4**.
- 4.2.2.2. Enter only HQ USAF/XPM validated colonel positions in the Manpower Data System (MDS).
- 4.2.2.3. Enter sequential position numbers in the first three columns of the command remarks field in MDS and reflects the same position number on the AF Form 81, Colonel Position description/core personnel document.

4.3. Criteria for Core Colonel Positions. Use the following criteria to assess core colonel requirements at varying levels of organization. Variances to the criteria are considered on a case-by-case basis and approved by HQ USAF.

4.3.1. General Criteria. The following criteria apply to all organizations:

- 4.3.1.1. No colonel deputies.
- 4.3.1.2. No colonel positions more than one organizational level below another colonel position.
- 4.3.1.3. No colonel positions in same organizational structure (work center) as GS-15.
- 4.3.1.4. An Air Force Form 81 is not required for Objective Wing Commanders, Vice Commanders and Group Commanders. However, MAJCOMs may choose to maintain PDs for these positions.

4.3.2. HQ USAF and MAJCOM Headquarters. Colonels allowed only down to division level. MAJCOM/SGs will have at minimum the BSC, MSC, and NC represented.

4.3.3. Field Operating Agencies (FOA) and Direct Reporting Units (DRU). No more than two colonels in the headquarters staff. FOA and DRU subordinate units fall under appropriate criteria, such as, wing, group, center, or the like.

4.3.4. Numbered Air Forces. Colonels allowed only in following positions: Vice Commander, Operations Division, Logistics Division, and the Staff Judge Advocate.

4.3.5. Installation Level:

4.3.5.1. Objective Wing. Colonels allowed only in the following positions: Commander (if no general officer), Vice Commander, and Group Commanders.

4.3.5.2. Centers. Only down to division level.

4.3.6. Medical:

4.3.6.1. Installation Medical Treatment Facilities. Medical Group Commanders, Senior BSC, MSC, and NC at Level 10 medical treatment facilities.

4.3.6.2. Medical Centers. Colonels allowed only down to division level.

4.3.7. AFMC Criteria. The following criteria apply to AFMC only:

4.3.7.1. MAJCOM Headquarters, down to division level.

4.3.7.2. ALCs, Product Centers, System Program Offices (SPOs), Laboratories, System Program Directorates (SPD), USAF School for Aerospace Medicine, Medical Centers, down to division level.

4.3.7.3. Staff Judge Advocate positions in organizations where the Commander has General Courts Martial (GCM) convening authority.

4.3.7.4. Objective Wing Commander (if no general officer), Vice Commander, and Group Commanders.

4.3.7.5. Senior BSC, MSC, and NC at Level 10 medical treatment facilities.

4.3.7.6. No colonel deputies.

4.3.7.7. No colonel positions more than one organizational level below another colonel position.

4.4. Establishing New Colonel Requirements.

4.4.1. Core Positions. Commands can establish colonel positions that meet the criteria in Paragraph **4.3.** without Air Staff approval, providing the command resources the colonel grade with an existing colonel grade (zero balance action). The command will retain the Air Force Form 81 and provide the following information (for both the current and new requirement) to USAF/XPMR immediately after taking the zero balance action.

4.4.1.1. Command.

4.4.1.2. Installation Name.

4.4.1.3. Position Title.

4.4.1.4. Position Number.

4.4.1.5. Organization Title.

4.4.1.6. Organization Type.

4.4.1.7. Organization Structure Code (OSC).

4.4.1.8. OSC Title.

4.4.2. Variance Positions.

4.4.2.1. Forward requests for variance positions (positions that do not meet the criteria in Paragraph [4.3](#) above) to HQ USAF/XPM and provide the following:

4.4.2.1.1. Justification for the requested colonel position.

4.4.2.1.2. Completed Air Force Form 81.

4.4.2.1.3. Organization chart reflecting requested position.

4.4.2.1.4. Existing command resource for zero balance action.

4.4.2.2. Provide the following information for all general officer, SES, GS-15, or colonel positions in the same organizational structure (work center) as the requested colonel position:

4.4.2.2.1. Manpower position number.

4.4.2.2.2. Grade and specialty (AFSC) of authorization.

4.4.2.2.3. Name, grade, duty title, and date assigned of individual filling the position.

4.4.2.2.4. Position description/core personnel document and evaluation statement for SES and GS-15 positions in the same work center

4.4.3. Variances to colonel core criteria require CSAF approval.

4.4.4. Use instructions at [Attachment 3](#) to prepare AF Form 81.

Chapter 5

CIVILIAN POSITION MANAGEMENT

5.1. Objective. The Air Force's objective is to manage civilian human resources within Congressional constraints and the Air Force civilian pay budget while balancing mission needs with economy and efficiency of operations. The policy directives that govern civilian resource management, position management and classification are AFPD 36-5, *Civilian Personnel Resource Management*, and AFPD 36-14, *Position Management and Classification*. The primary controlling factors in managing civilian resources are the validation of the civilian manpower requirement by the manpower function, the availability of manpower authorizations, workyears, and financial resources. MQs validate civilian requirements by reviewing civilian position description/core personnel documents.

5.2. Review of Civilian Position description/core personnel documents. The Installation MQ reviews new or revised civilian position description/core personnel documents to:

5.2.1. Ensure the duties are consistent with the specialty and skill levels allowed by existing manpower standards, determinants, or guides. The Air Force Specialty (AFS) descriptions and codes do not express civilian occupation series and grades, but can serve as indicators of the type and level of civilian skills required.

5.2.2. Ensure the approved objective organization structure is maintained.

5.2.3. Maintain span of control and layering principles (complexity of mission, similarity in organizational units, level of supervision required by subordinate units, degree of coordination required among subordinates, physical distance between subordinates and supervisor, organization structure).

5.2.4. Eliminate unnecessary deputy or assistant duties. Co-equal managerial positions or duplication of supervisory duties at any level is not permitted, whether performed by two or more military, civilians, or a combination. MAJCOM/XPMs approve deputy and assistant positions only if essential.

5.2.5. Determine and validate manpower requirements to meet mission needs.

5.3. Documentation of New Civilian Requirements. If a new civilian requirement is not covered by an existing manpower standard, the Installation MQ prepares a variance and an authorization change request (ACR) and submits them to the major command for action.

Chapter 6

CONTRACT MANPOWER EQUIVALENTS (CME)

6.1. Objective. Manpower and Organization (MO) functions must accurately define our contract manpower equivalent (CME) requirements for service-type contracts. CMEs apply to services listed in **Attachment 4** of this instruction.

6.2. Purpose. CME computation and documentation provide the Air Force with an estimate of the size of the contractor workforce, as part of the total Air Force manpower requirements documented in the Manpower Data System (MDS) supporting the Air Force mission. The methodology in this chapter will be used to compute and validate Air Force CME requirements for applicable service-type contracts.

6.3. Roles and Responsibilities. The following roles and responsibilities apply:

6.3.1. HQ USAF:

6.3.1.1. HQ USAF/XPM provides MAJCOMs with CME computation and documentation policy to ensure CMEs are properly entered in the MDS. HQ USAF/XPM serves as the primary Air Force point of contact for consolidating and reporting CME information to external agencies.

6.3.1.2. SAF/AQC provides guidance to MAJCOM/Directors of Contracting regarding the policy for standard CME computation and documentation, as it applies to contracting activities throughout the Air Force.

6.3.1.3. HQ USAF/IL provides guidance to MAJCOM functional managers to ensure the policy for standard CME computation and documentation as it applies to Depot Maintenance Activity Group (DMAG) and Supply Maintenance Activity Group (SMAG) activities.

6.3.1.4. HQ USAF/FM provides guidance to assist MAJCOM and Wing Manpower and Contracting offices in their efforts to identify and quantify CMEs based on budget expenditures (ref. para. **6.5.1.3.**).

6.3.1.5. 11WG/XPM implements CME computation and documentation policy for the 11 WG, Headquarters United States Air Force, FOAs, DRUs, Air Force elements in DOD agencies, and unified commands for which it provides manpower support. 11WG/XPM ensures that current CMEs are loaded in the August end of month MDS file.

6.3.2. Major Commands (MAJCOM).

6.3.2.1. MAJCOM/XPMs, in coordination with MAJCOM/Directors of Contracting, implement and distribute to subordinate manpower offices CME computation and documentation policy. MAJCOM/XPMs also ensure MDS projects from base level and MAJCOM input reflect current CME requirements (i.e., headquarters and wing level) and are loaded in the August end of month MDS file.

6.3.3. Center/Installation.

6.3.3.1. The contracting, functional managers, civilian personnel, and financial management offices play vital roles in the CME validation process. The MO offices, in coordination with these agencies document CME data for applicable service-type contracts on the base. Specific responsibilities are outlined in the following paragraphs:

6.3.3.2. **Manpower and Organization Office.**

6.3.3.2.1. Review and coordinate on all requests for service contracts.

6.3.3.2.2. Review CMEs when service-type contracts are requested, modified, or terminated.

6.3.3.2.3. Non-A-76 CMEs. Maintain accurate accounting of CMEs by Functional Account Code (FAC) using the AF Form 4298, CME Documentation Log.

6.3.3.2.4. A-76 CMEs. Enter CMEs in the MDS immediately upon the final cost comparison or direct conversion decision announcement.

6.3.3.2.5. Recurring CMEs. Review/validate CME annually for accuracy, with functional participation. Transmit MDS CME transactions to command XPM as contract service requests are processed (e.g., AF Form 9) in time to be included in the August end of month MDS file.

6.3.3.2.6. Non-recurring CMEs. Review/validate CME annually for accuracy with functional participation. From total non-recurring requirements entered on the CME Documentation Log, transmit MDS CME transactions to command XPM in time to be included in the August end of month MDS file. This update is accomplished once per fiscal year.

6.3.3.2.7. Centrally Managed Contracts. These contracts are typically managed by one organization from which other organizations can utilize/buy support. Determine the local user portion of the contract, in coordination with the functional OPR, and enter associated MDS CME transactions for that organization (e.g., an environmental support contract administered by AF Center for Environmental Excellence (AFCEE) that MAJCOMs might purchase environmental civil engineer support.)

6.3.3.3. **Contracting Office.**

6.3.3.3.1. Provide supporting data (e.g., contract requirements, total contract cost, contract labor cost, contractor full-time staffing, or man-hour estimates) as available to the manpower office, as required for applicable service-type contracts.

6.3.3.4. **Functional OPR.**

6.3.3.4.1. Routes requests for service contracts, including modifications and terminations, to the Manpower office for review prior to submission of the requirement to contracting agencies.

6.3.3.4.2. Provides technical information (e.g., AFSC, FAC, skill-level, contract cost, start/stop dates) to the Manpower office for use in documentation of CME requirements.

6.3.3.4.3. Assist Manpower to verify CME data to be entered in the MDS in time to be included in the August end of month MDS file.

6.3.3.5. **Financial Management Office.** The Financial Management office provides actual service contract expense data to the Manpower office, quarterly, for obligations that may result in contractor support as required.

6.3.3.6. **Civilian Personnel Office .** The Civilian Personnel office provides personnel information supporting the CME validation to the functional representative and Manpower office as required.

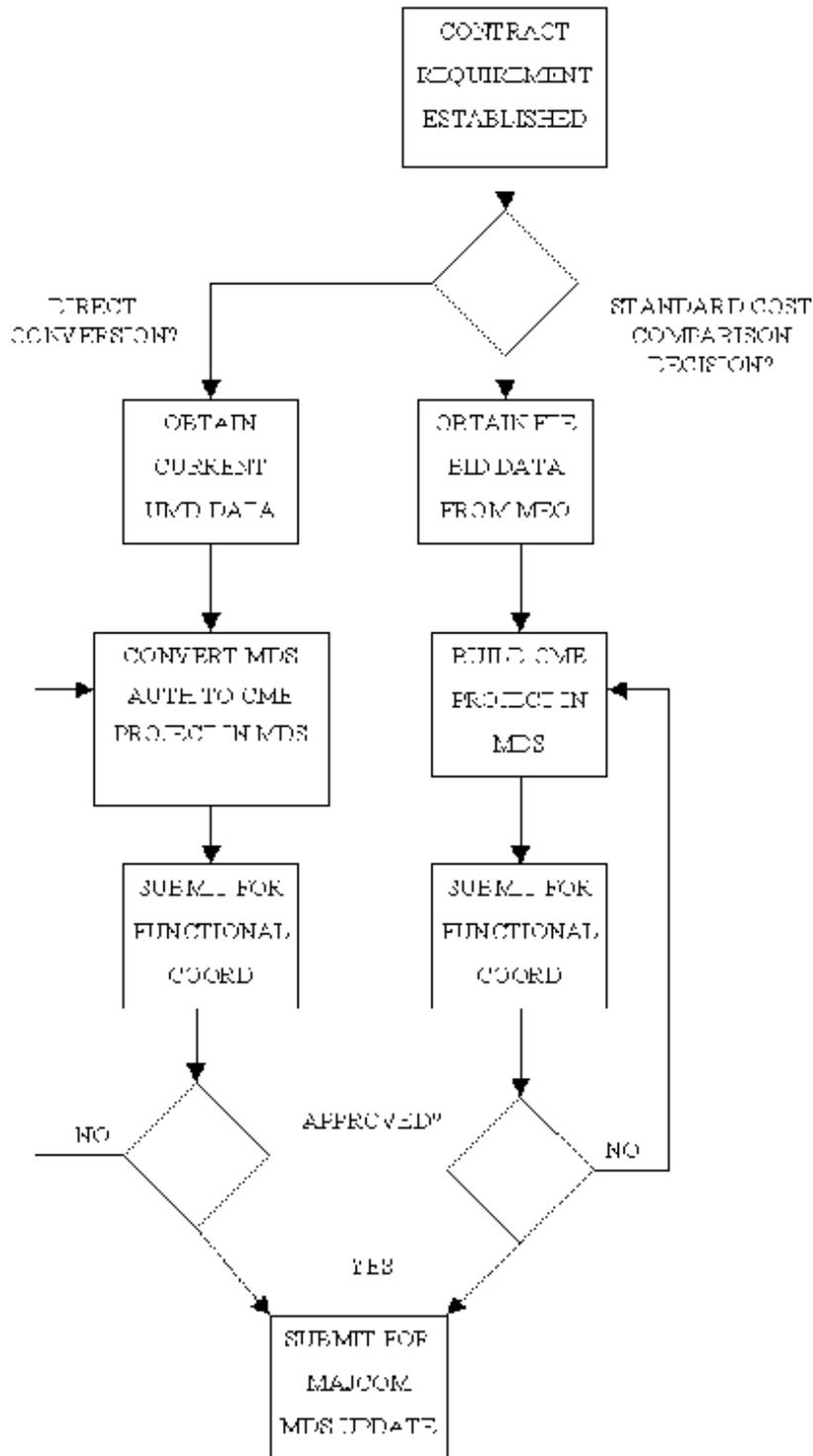
6.4. Methodology for CME Computation Resulting From Competitive Sourcing (i.e., A-76 Studies).

6.4.1. When an activity converts to a contract operation as a result of a cost comparison study, the CMEs entered in the MDS are the number of manpower positions bid in the Air Force Most Efficient Organization until the current contract is subsequently terminated or modified. If terminated, delete CME requirements from MDS effective with the termination date. If modified, and requirements mandate changes to CMEs, determine new requirement and update MDS.

6.4.2. When an activity converts to contract using direct conversion procedures, the CMEs entered in the MDS are the number of manpower positions authorized in the activity prior to conversion. In the event of contract termination, delete CME requirements effective as of the termination date. If contract modification mandates changes to CMEs, determine new requirement and update MDS.

Figure 6.1. Flowchart for Competitive Sourcing (A-76) CME Process.

FLOWCHART FOR COMPETTIVE SOURCING (A-76) CME PROCESS



6.5. Methodology for CME Computation Outside the Competitive Sourcing Process .

6.5.1. CMEs are also computed for applicable service-type contract workload (recurring and non-recurring) of \$25,000 or more annually. Recurring workload normally continues throughout the year from year to year (e.g., custodial services, food services). Non-recurring workload is limited to a one-time requirement, generally lasting one year or less, and is not continuous from year to year (e.g., disaster clean-up, air show/open house support). The total CME work year equivalent for each function will be updated in MDS at the end of each fiscal year. The intent is to obtain the most accurate estimate of CMEs for the work performed. Methods 1, 2, and 3, outlined in the following paragraphs, reflect a hierarchy of most to least accurate and will be used to calculate CMEs.

6.5.1.1. Method 1. Use contractor equivalent full-time staffing levels, as available through the contracting office and verified by the functional OPR. Work with the contracting officer and functional OPR to obtain the appropriate manpower detail and enter verified data directly into MDS.

6.5.1.2. Method 2. If a functional estimate is not available, estimate CME requirements by applying existing manpower standards or other techniques in AFMAN 38-208, Management Engineering Program (MEP) Quantification Tools, such as operational audit.

6.5.1.3. Method 3. If Method 1 and Method 2 are not feasible, use the contract value budgeted/obligated or awarded for the effort involved as a basis to estimate CME requirements. Financial management personnel at the base level can assist action officers in extracting actual obligation/expenditure data from financial systems, as well as budgeted funding set aside for future obligation. Once collected, this data may be categorized by element of expense investment code (EEIC) for CME estimation. Financial management personnel can also assist in the management of data contained in DoD legacy systems (i.e., Integrated Accounts Payable System (IAPS), Mechanization of Contract Administration Services (MOCAS), Computerized Accounts Payable System (CAPS)), which do not contain actual and recurring obligation amounts, but specific contractual data.

Figure 6.2. Flowchart for Non-A-76 CME Process (Recurring).

FLOWCHART FOR NON-A-76 CME PROCESS (RECURRING)

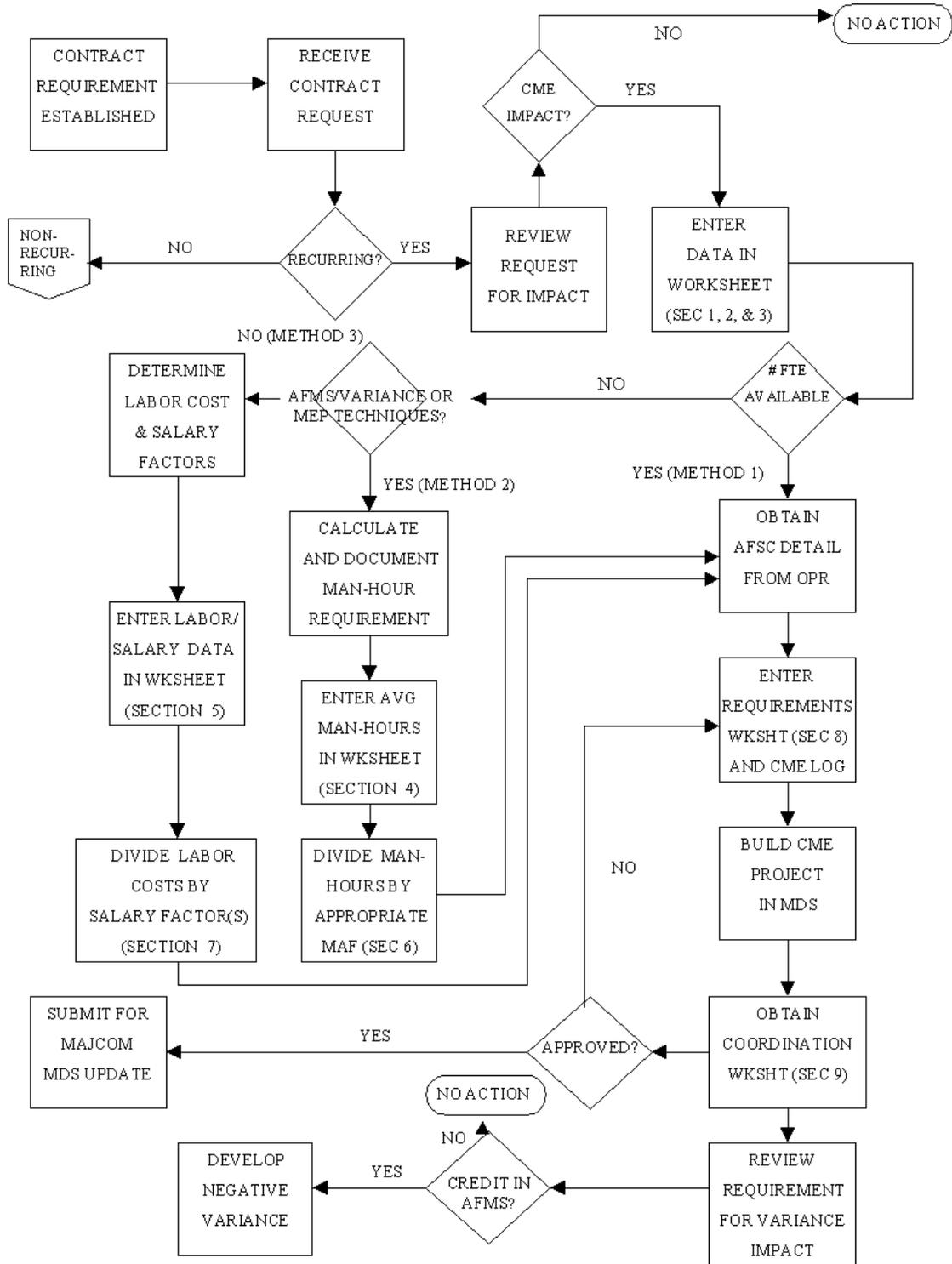
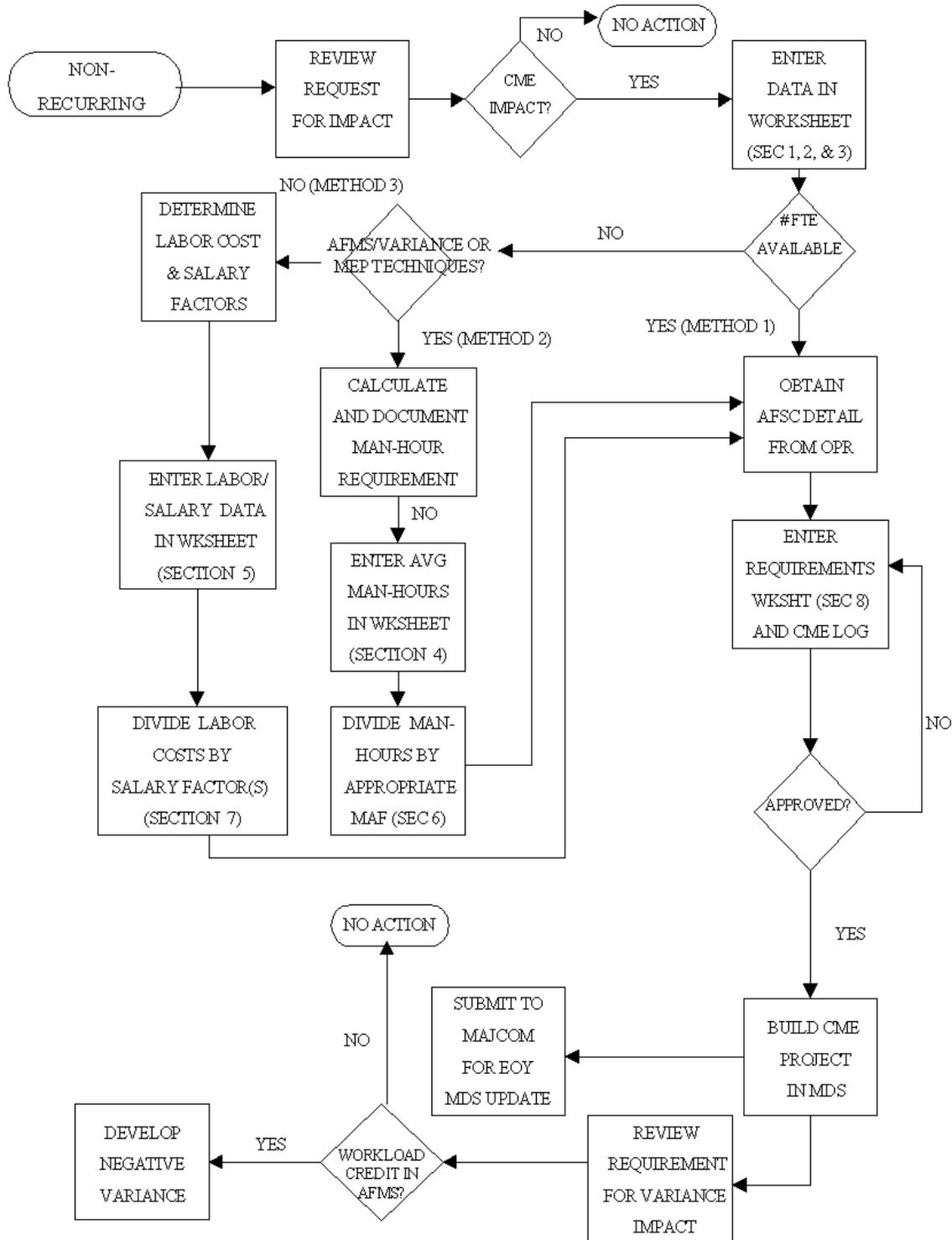


Figure 6.3. Flowchart for a Non-A-76 CME Process (Non-Recurring).

FLOWCHART FOR NON-A-76 CME PROCESS (NON-RECURRING)



6.5.2. The AF Form 4299, CME Computation Worksheet, provides a step-by-step process for the local Manpower office and MAJCOM/XPM (for workload performed at headquarters) to determine the non-A-76 CMEs associated with a service-type contracts. An electronic version of this worksheet can be found on the AFMIA web-site at <http://www.afmia.randolph.af.mil>. Information obtained through the completion of the CME Computation Worksheet should be transferred onto the CME Documentation Log maintained by the Wing Manpower office or MAJCOM/XPM (for headquarters workload). The following explains each section of the worksheet.

6.5.2.1. **Section 1 - Source of Contract Request.** Identify the appropriate source(s) used to request the contract service(s). Enter appropriate code from Sections 1.a through 1.f.

6.5.2.2. **Section 2 - Contract Request Detail.** Obtain contract information from contracting office and verify dates with functional representative. Enter appropriate codes in Section 2.a through 2.f, as applicable.

6.5.2.3. **Section 3 - Unit Manpower Document Data.** Enter the requested data in Sections 3.a through 3.g. The unit responsible for contract workload is the organization that would be required to accomplish the contracted workload if it were being performed in-house. (Example: For a "Telephone Maintenance" contract in support of the Hospital, the base Communications Squadron would normally be responsible for accomplishing this type of workload, if it were to be done in-house. Therefore, they would be the "unit responsible for contract workload," not the Hospital).

6.5.2.4. **Section 4 - Workload Calculations.** Use this section if contractor full-time staffing estimates cannot be determined using Method 1. If the applicable manpower standard does not provide sufficient detailed information to allow the computation of average monthly man-hours, explain this in attached documentation, and use the "cost estimating procedures" in Section 5. There may be unusual circumstances where work covered by a manpower standard or variance, and resulting from an extreme or unusual surge in workload, is accomplished by a one-time contract. When this occurs, adjustments to in-house manpower requirements may not be appropriate. However, for recurring and non-recurring workload that produces a CME in a function for two or more consecutive years, the associated workload man-hours should be documented in Section 4.a.

6.5.2.5. **Section 5 - Labor Cost Calculations.** If CMEs cannot be quantified using contractor full-time staffing estimates (Method 1) or calculations based on workload (Method 2), use this section to estimate CMEs based on contract dollars (Method 3). For labor cost approximation, the manpower technician should work with the contracting officer, and the functional OPR to obtain labor cost estimates, and average salary rates using the most recent Department of Labor (DoL) Wage Determination with consideration for collective bargaining agreements and/or host country equivalents for foreign locations. Once the average contractor salary has been determined, it should be adjusted by the current Office of Management and Budget (OMB) Fringe Benefit Factors available on the AFMIA web-site at <http://www.afmia.randolph.af.mil> or host country equivalent for foreign locations. Once the total CMEs are determined for a function based on costs, work closely with the functional OPRs to determine the appropriate functional data used for each CME to be loaded in MDS.

6.5.2.6. **Section 6 - CME Computation Based on Workload.** This section computes CMEs based on information entered in Section 4 using Method 2. Otherwise leave blank.

6.5.2.7. **Section 7 - CME Computation Based on Contractor Labor Cost.** This section computes CMEs based on information entered in Section 5 using Method 3. Otherwise leave blank.

6.5.2.8. **Section 8 - Total CMEs Required.** This section shows CME totals derived from using CME calculation Methods 1 and 2 by combining totals shown in Sections 6 and 7 respectively. For CME calculation Method 1, enter annualized CME requirement directly based on verification of contractor's full-time staffing level and skip completion of Sections 4 through 7.

6.5.2.9. **Section 9 - Approval.** Obtain Manpower and Functional signatures to document approval of CME computation.

6.6. CME Documentation.

6.6.1. A-76 CMEs.

6.6.1.1. CMEs determined by paragraph 6.4. are entered in the Commercial Activity Management Information System (CAMIS) as Number of Government Work Years Bid.

6.6.1.2. For CMEs resulting from an A-76 cost comparison, use the UMD detail outlined in the government's most efficient organization (MEO) to establish CMEs.

6.6.1.3. For CMEs resulting from an A-76 direct conversion, use the UMD detail outlined in the MDS at the time of the direct conversion to establish CMEs.

6.6.1.4. MDS Specific Coding Instructions for A-76 CMEs:

6.6.1.4.1. Enter all attributes required for a CME record from the cost comparison or direct conversion.

6.6.1.4.2. Enter Manpower Standard Implementation (MSI) attribute of "g", and Manpower Function Code (FCT) attribute of "j".

6.6.1.4.3. Enter Department of Defense function code (DFC), year of last review (YLR), and year of next review (YNR) based on details of the specific completed cost comparison or direct conversion.

6.6.1.4.4. Enter the Air Force Remarks (RMK) attribute listed below to identify an A-76 CME. In addition, if an A-76 CME possesses an Air Force Remarks code other than C1, it must be corrected.

<u>Code</u>	<u>Definition</u>
C1	A-76 Study

6.6.2. Non-A-76 CMEs.

6.6.2.1. The CME Documentation Log is available on the AFMIA website at <http://www.afmia.randolph.af.mil>. The spreadsheet will be used to document all CME MDS transactions for service-type contracts occurring outside the A-76 process.

6.6.2.2. CMEs are estimated for recurring workload, documented on the CME Documentation Log, and are loaded into the MDS as soon as possible after contract award.

6.6.2.3. CMEs are estimated for non-recurring workload, documented on the CME Documentation Log, and are loaded in the MDS in time to be included in the August end of month MDS file. The CME entered in MDS (for the next fiscal year) should reflect the work year equivalent for the CME workload in a function during the current fiscal year. For example, if the Pavement and

Grounds function has a contract requiring three CMEs and another contract requiring two CMEs, the MDS should be updated to reflect five CMEs for that function.

6.6.2.4. Where an AFMS exists, the associated manpower with validated CMEs will be subtracted from the total earned authorizations during application of the standard. For non-recurring CME workload, subtract CME workload for functions that document CMEs for two or more consecutive years.

6.6.2.5. MDS Specific Coding Instructions for Non-A-76 CMEs:

6.6.2.5.1. Enter all attributes required for a CME record.

6.6.2.5.2. Recurring contracts. Enter CME effective the date the contract starts through infinity, unless the end date is known.

6.6.2.5.3. Non-recurring contracts. Enter CMEs as an annualized amount--for the previous fiscal year--with an effective date of the 4th quarter of the current fiscal year and a THRU date as the 4th quarter of the following fiscal year.

6.6.2.5.4. Enter Manpower Standard Implementation (MSI) attribute of "g", and Manpower Function Code (FCT) attribute of "j" and the appropriate attribute for the Department of Defense function code (DFC). Also, enter year of last review (YLR), and year of next review (YNR).

6.6.2.5.5. Enter one of the Air Force Remarks (RMK) attributes listed below to identify the appropriate Non-A-76 CME definition. In addition, if a Non-A-76 CME currently has an Air Force Remarks code, it must be corrected to correspond to one of the definitions listed below.

<u>Code</u>	<u>Definition</u>
C2	Advisory and Assistance Service (A&AS)
C3	Federally Funded Research and Development Center (FFRDC)
C4	Depot Maintenance Activity Group (DMAG)
C5	Supply Maintenance Activity Group (SMAG)
C6	Contract not described in C1 through C5

6.6.2.5.6. Show CMEs in the unit responsible for contract workload if it were being performed in-house. If the unit that would be responsible for accomplishing the workload does not exist, reflect the CMEs in the next higher unit level of the installation, where the work is performed. Add annualized CME estimated for each organization, by FAC, to determine the total CME for the organization, prior to entry into MDS.

Chapter 7

ACTIVE GUARD AND RESERVE (AGR) REQUIREMENTS

7.1. Responsibilities and Guidelines for AGR Positions:

7.1.1. MAJCOMs establish AGR authorizations for members of the Air National Guard of the United States (ANG) or Air Force Reserve Command (AFRC) voluntarily serving on extended active duty or active duty (other than training) for a specified time, usually over 360 days. Do not establish authorizations to circumvent Congressional or Secretarial limitations on management headquarters activities or Air Force personnel strengths. AGR authorizations are subject to the usual budgetary review just as any other Air Force program. Specific reasons for AGR authorizations are at [Attachment 5](#).

7.1.2. MAJCOM-established AGR authorizations will:

7.1.2.1. Include duties that support the applicable section of United States Code (USC), Title 10 Armed Forces, AFPD 36-21, Utilization and Classification of Air Force Military Personnel, and AFI 36-2116, Extended Active Duty for Reserve Component Officers.

7.1.2.2. Include duties not routinely assigned to or not the responsibility of the active force.

7.1.2.3. Be rotated between the ANG and USAFR if feasible.

7.1.3. The Director of the Air National Guard (NGB/CF) and the Chief of the Air Force Reserve (HQ USAF/RE) validate all AGR authorizations not specifically established in law and ensure position currency. The Deputy Assistant Secretary of the Air Force, Reserve Affairs (SAF/MIR) approves establishing or changing AGR authorizations not specifically established in law.

7.1.4. 10 USC 12011 and 12012 limit grades for AGR field grade officer and senior enlisted authorizations. These authorizations are in addition to the overall active Air Force grade ceilings and are not chargeable to the active grade ceilings. Grades for AGR tour enlisted authorizations are not subject to the limits on overall numbers imposed by 10 USC-517 for chief and senior master sergeants; however, they are limited by 10 USC 12012. The DoD Authorization Bill establishes annual grade ceilings for chief and senior master sergeants.

7.1.5. Report all AGR tour requirements or authorizations in the Manpower Authorizations Transaction Report, part A, and identify as functional category X.

7.2. Procedures to Change or Request New Authorizations:

7.2.1. A single request may include more than one similar type position. All requests must identify the total number of authorizations required and follow the instructions in [Attachment 6](#). AGR resources are extremely limited. Requests for new authorizations should include potential resource options.

7.2.2. MAJCOM/XPMs or equivalent send requests to the NGB/CF, 2500 Army Pentagon, Washington DC 20310-2500, or to HQ USAF/RE, 1150 Air Force Pentagon, Washington DC 20330-1150. Requirements in Joint and defense Agencies are validated by the agency manpower office and forwarded through appropriate channels to NGB/CF or HQ USAF/RE for funding considerations

7.2.3. NGB/CF and HQ USAF/RE review the requests for need and compliance for allocation and use and for impact on Congressional, Secretarial, and budget limits. SAF/MIR approves validated requests.

7.2.4. NGB/CF and HQ USAF/RE send copies of the Secretarial decision and supporting documentation to the requesting Manpower activity. For the National Guard Bureau and the Office of Air Force Reserve, the servicing manpower and organization activity is 1100 National Capital Region Support Group (1100 NCR SPTG/XPM), 1440 Air Force Pentagon, Washington DC 20330-1440

7.2.5. Air Force Reserve Command AGR unit requirements and authorizations supporting Air Force approved programs do not need to be forwarded to HQ USAF/RE. HQ AFRC/XPM is responsible for maintaining AGR authorizations within approved end strength and grade ceilings for the AFRC Active Guard/Reserve unit program.

Chapter 8

MILITARY ADVANCED ACADEMIC DEGREE (AAD) REQUIREMENTS

8.1. Responsibilities for Developing and Reviewing AAD Positions:

8.1.1. HQ USAF functional managers or academic specialty monitors (ASM) develop criteria for assessing AAD requirements for their career field and will provide this criteria to MAJCOM, FOA, DRU, and joint activity functional managers and DP for use in the verification process. Annually, ASMs attend the Air Force Education Requirements Boards (AFERBs) which verify graduate education requirements.

8.1.2. MAJCOM/XPMs code verified or changed AAD requirements in the MDS after MAJCOM Functional Managers substantiate their need through the MAJCOM DPs. All AAD requirements must be updated in the MDS no later than 1 Jul each year.

8.1.3. MAJCOM, FOA, and DRU functional managers review all their AAD billets, applying criteria developed by the Air Staff functional manager or ASM.

8.2. Verification Process. The MAJCOM, FOA, and DRU XPMs will:

8.2.1. Identify all authorizations in the MDS currently possessing an Academic Specialty Code (ASC).

8.2.2. Provide a list of AAD coded positions to MAJCOM/DP representative for their use in directing the verification process. Each functional OPR or ASM reviews their AAD billets and authenticates them for mission essentiality.

8.2.3. Certify that Section I - "*Current Position Information*" on AF form 1779 is accurate.

8.3. Follow-On Action for XPMs. After AFERB completion, a joint letter identifying approved quotas for coded positions will be sent to MAJCOM DPs/XPMs.

8.3.1. Positions identified for masters remain coded for 6.5 years and doctorate for 8 years unless a waiver is approved. See AFI 36-2302, *Professional Development*.

8.3.2. Out of cycle requirements, those identified prior to the yearly AFERB, are coded in MDS only after MAJCOM Functional OPRs had substantiated their need through their MAJCOM DP. These are restricted to mission essential.

Chapter 9

AIRCREW REQUIREMENTS

9.1. Coding Aircrew Requirements.

9.1.1. **Aircrew Position Indicator (API) Codes.** All aircrew manpower authorizations require an API code of 1, 2, 3, 4, 5, 6, 7, 8, A, B, C, D, or E. AFI 11-401, *Flight Management*, contains instructions for determining the correct API code. Enter one of the following codes into the Manpower Database System (MDS) for each aircrew authorization.

9.1.1.1. **API 1 (Pilot) and API 2 (Navigator or observer).** Applies to pilot, navigator or observer (rated) positions used primarily for cockpit duty. Do not use these API codes for flying squadron commander and operations officer positions.

9.1.1.2. **API 3.** Applies to rated staff or supervisory positions at wing level and below that have responsibilities and duties that require rated expertise but do not require the incumbent to fly.

9.1.1.3. **API 4.** Applies to rated staff positions above wing level that have responsibilities and duties that require rated expertise but do not require the incumbent to fly.

9.1.1.4. **API 5.** Applies only to flight surgeon positions. This code is restricted to AFSC 48xx or AFSC 40C0A/B/C. AFMS 51xx, Medical Command (bases with an active flying mission); AFMS 5310, Flight/Missile Medicine; and AFMS 5310A, Squadron Medical Element, determine the requirement for Aerospace Medicine Physicians. AFMOA/SGOA has approval authority over designation of API 5 for positions not covered by the above AFMSs.

9.1.1.5. **API 6.** Applies to rated staff or supervisory positions at wing level and below that have responsibilities and duties that require the incumbents to actively fly. Includes flying squadron commander and operations officer positions.

9.1.1.6. **API 7.** Applies to active duty aircrew personnel not occupying US Air Force positions whose assigned duties require flying (e.g. Exchange Officer). Air Force manpower documents do not use this code. Only HQ AFPC uses this code.

9.1.1.7. **API 8.** Applies to rated staff or supervisory positions above wing level that have responsibilities and duties that require the incumbent to actively fly.

9.1.1.8. **API A.** Applies to non-rated line unit positions used primarily for aircrew duty.

9.1.1.9. **API B.** Applies to non-rated staff or supervisory positions at wing level and below that have responsibilities and duties that require the incumbents to actively fly.

9.1.1.10. **API C.** Applies to non-rated staff or supervisory positions at wing level and below that have responsibilities and duties that require aircrew expertise but do not require the incumbents to fly.

9.1.1.11. **API D.** Applies to non-rated staff or supervisory positions above the wing level that have responsibilities and duties that require the incumbents to actively fly.

9.1.1.12. **API E.** Applies to non-rated staff or supervisory positions above the wing level that have responsibilities and duties that require aircrew expertise but do not require the incumbents to fly.

9.1.1.13. **API 0 (zero).** Applies to **all** AFSCs not covered by the above.

9.1.2. **Manpower Standards Implementation (MSI) Codes.** The MSI code is a key indicator in the management of aircrew requirements. It is essential MAJCOM XPMs maintain their aircrew records with correct MSI codes.

9.1.2.1. **Chapter 2, Table 2.1.**, defines each MSI code.

9.1.2.2. AF Form 480, **Aircrew AFSC/Active Flying Justification**, justified positions will be assigned MSI code "Z."

9.2. Responsibilities for Aircrew Position Management.

9.2.1. **Base Level.** Forward requests for new authorizations and changes to existing authorizations to MAJCOM for validation. Conduct annual review of aircrew requirements as directed by MAJCOM.

9.2.1.1. **OPR.** Identify individual aircrew requirements, document supporting justification (include AF Form 480, as required), and coordinate aircrew positions requests with the base manpower office.

9.2.1.2. **MQ.** Coordinate with OPRs on aircrew requirements changes and annual review of aircrew requirements. Submit MDS changes after MAJCOM approval received.

9.2.2. MAJCOM.

9.2.2.1. Assign rated AFSCs only to those positions with duties clearly requiring rated skills as described in AFMAN 36-2105, *Officer Classification*. Ensure rated officer positions are established at the lowest organizational level consistent with mission requirements.

9.2.2.2. Submit proposed changes to existing aircrew ratios or the establishment of aircrew ratios for new aircraft to HQ USAF/XPP and provide information copy to HQ USAF/XOO.

9.2.2.3. Assign an OPR within the Command Surgeon's staff to manage rated officer justifications for flight surgeons (API 5) as described in paragraph **9.1.1.4**. For requests not covered by AFMSs in paragraph **9.1.1.4**, submit the AF Form 480 directly to AFMOA/SGOA, 110 Luke Avenue, Room 405, Bolling Air Force Base, DC 20332-7050.

9.2.2.4. Submit proposed additions or changes in existing O-6 rated staff authorizations to HQ USAF/XPMR (see **Chapter 3**, paragraph **3.4**).

9.2.2.5. Program Flying Training (PFT).

9.2.2.5.1. Forward methodology used to determine Program Flying Training (PFT) instructor requirements, including any changes or deviations to methodologies, to AFCQMI for certification with courtesy copy to HQ USAF/XOOT. Document all PFT methodologies as a policy directive, pamphlet, or operating instruction.

9.2.2.5.2. Identify all PFT gained API 1/2/A instructor positions with MSI code "Q."

9.2.2.5.3. Submit advanced student requirements to HQ USAF/XOOT semi-annually (NLT 15 Dec / 15 Jul). Summarize these requirements by weapon system, course number, and crew position for each year of the Future Years Defense Program (FYDP). Determine all advanced student requirements by multiplying approved annual student production or loads by course length in calendar days and dividing by 365.

9.2.2.6. Annual review of aircrew requirements.

9.2.2.6.1. Revalidate aircrew ratios for each weapon system. Ensure latest, funded exercise position is being used. Verify correct application to MDS for all units.

9.2.2.6.2. Revalidate all API 1/2/A requirements not gained through an aircrew ratio or PFT. Verify correct application by a review of manpower requirements data obtained from MDS.

9.2.2.6.3. Review and revalidate all aircrew staff positions to ensure aviator expertise is required. If desired, staff reviews may be accomplished in quarterly increments.

9.2.2.6.4. Conduct and forward results of annual review to HQ USAF/XOOT NLT 31 October of each year. Include table of aircrew ratios used.

9.2.2.7. MAJCOM DOs (or equivalent).

9.2.2.7.1. Assign an OPR, within the MAJCOM staff, to approve additions or changes to aircrew requirements and to maintain the command's baseline staff requirements. Forward OPR information to HQ USAF/XOOT.

9.2.2.7.2. In coordination with MAJCOM XPM, validate base level requests for new authorizations and changes to existing authorizations.

9.2.2.7.3. Provide offsetting authorizations for new aircrew staff requirements (API 3, 4, 6, 8, B, C, D, and E) unless new weapon systems, growth in existing weapon systems, or new aircraft missions generate new requirements. Additions or changes to aircrew staff requirements not tied to changes in force structure or aircraft missions are possible only with tradeoffs for API codes within the same aircrew specialty. Offsetting authorizations are also required for any aircrew staff changes generated by new manpower standards or the reapplication of existing manpower standards.

9.2.2.7.4. Ensure command requirements are at or below the baseline staff requirements by the end of each FY. Any change to the baseline staff requirements must be approved in advance by HQ USAF/XOO.

9.2.2.7.5. Maintain a current file of all AF Forms 480.

9.2.2.8. MAJCOM XPMs (or equivalent). Coordinate with DO on aircrew requirement changes and the annual review of aircrew requirements. Update manpower requirement API attribute in MDS to reflect approval of new or changed positions.

9.2.3. FOAs, DRUs, and Joint Agencies.

9.2.3.1. Assign rated AFSCs only to those positions with duties clearly requiring rated skills as described in AFM 36-2105. Ensure rated officer positions are established at the lowest organizational level consistent with mission requirements.

9.2.3.2. Submit requests (AF Form 480) for new authorizations and changes to existing authorizations, along with rationale, to HQ USAF/XOOT for approval **EXCEPT** as follows:

9.2.3.2.1. Submit all requests for rated justification for flight surgeon positions (API 5) directly to AFMOA/SGOA, 110 Luke Avenue, Room 405, Bolling Air Force Base, DC 20332-7050.

9.2.3.2.2. Submit proposed additions or changes in existing O-6 rated staff authorizations to HQ USAF/XPMR (see **Chapter 3**, paragraph 3.4.).

9.2.3.3. Provide offsetting authorizations for new aircrew staff requirements (API 3, 4, 6, 8, B, C, D and E) unless new weapon systems, growth in existing weapon systems, or new aircraft missions generate new requirements. Additions or changes to aircrew staff requirements not tied to changes in force structure or aircraft missions are possible only with tradeoffs for API codes within the same aircrew specialty. Offsetting authorizations are also required for any aircrew staff changes generated by new manpower standards or the reapplication of existing manpower standards. HQ USAF/XOOT approves all exceptions to this guidance.

9.2.3.4. Annual review of aircrew requirements.

9.2.3.4.1. Revalidate all API 1/2/A requirements not gained through aircrew ratio. Verify correct application of all API attributes in MDS for all units.

9.2.3.4.2. Review and revalidate all aircrew staff positions to ensure aviator expertise is required. If desired, staff reviews may be accomplished in quarterly increments.

9.2.3.4.3. Conduct and forward results of annual review to HQ USAF/XOOT NLT 31 October of each year.

9.2.3.4.4. Maintain a current file of all AF Form 480s.

9.2.4. **HQ USAF/XOO.** Establish rated staff baselines for MAJCOM DOs and provide an information copy to MAJCOM XPMs using end of FY requirements. The baseline will set each MAJCOMs' maximum total staff pilots, maximum staff pilots for each individual Rated Distribution and Training Management (RDTM) Category (except "Unspecified"), maximum total staff navigators, and maximum staff navigators for each individual RDTM Category (except "Unspecified").

9.2.5. HQ USAF/XOOT.

9.2.5.1. Evaluate requests for new positions and changes to existing authorizations. Forward approval or disapproval to the requester.

9.2.5.2. Coordinate with HQ USAF/XPMR on requests for new O-6 rated staff authorizations.

9.2.5.3. Ensure approved crew ratio changes are incorporated into AFI 65-503.

9.2.5.4. Update aircrew requirements estimate using funded aircrew ratios.

9.2.5.5. Review annual review of aircrew requirements from each MAJCOM, FOA, DRU, and joint agency. Forward any comments or corrections required to the appropriate MAJCOM, FOA, DRU, or Joint Agency.

9.2.6. **HQ USAF/XPMR.** Evaluate requests for new O-6 rated staff authorizations in coordination with HQ USAF/XOOT. Forward approval or disapproval to the originator.

9.2.7. **AFMOA/SGOA.** Evaluate requests for new API 5 positions and changes to existing authorizations. Forward approval or disapproval to the originator.

9.3. Aircrew Requirements Documentation.

9.3.1. Rated requirements for non-rated AFSCs (other than 11X/12X) must have a "P" or "N" prefix to specify a pilot or a navigator requirement. AFMAN 36-2105 establishes which AFSCs are autho-

rized to have the “P” or “N” prefix. In addition, AFMAN 36-2105 requires a suffix to be added indicating the required Major Weapons System background (i.e., P62E3W, P10C0P). This suffix takes precedence over normal AFSC shredout codes.

9.3.2. AF Form 480, Aircrew AFSC / Active Flying Justification.

9.3.2.1. Required for all staff or supervisory positions not covered by an approved manpower standard with the following **exceptions**:

9.3.2.1.1. All O-6 or higher rated positions.

9.3.2.1.2. Those having operational control of assigned aircraft.

9.3.2.1.3. Aircrew evaluation flight examiner positions authorized in Functional Account Code 13A1 at the Operations Group level.

9.3.2.1.4. Aircraft Systems Flight Evaluator, “F” prefix, positions at the Operations/Logistics Group level.

9.3.2.1.5. Statutory tour rated staff.

9.3.2.2. The AF Form 480 must clearly justify the requirement for aviator expertise (see [Attachment 7](#) for instructions).

9.3.2.3. The AF Form 480 justification is a unique combination of AFSC, API code, duty description, and aviator justifications. Any changes to the duty requirements that substantially alter the basis for the original position approval, invalidates the original AF Form 480. The position **must** be revalidated and resubmitted for approval to HQ USAF/XOOT, AFMOA/SGOA, MAJCOM/DO OPRs or MAJCOM/SG OPRs as appropriate. In addition, approval is required for the following changes:

9.3.2.3.1. Change from pilot to navigator, or navigator to pilot.

9.3.2.3.2. Change from a generalist AFSC (e.g., 11G3, 12G4, P62E3W, N80C0W) to a major weapon system generalist or specific AFSC (e.g., 11F3Y, 12B3A, P62E3P, N80C0R).

9.3.2.3.3. Change from a major weapon system generalist AFSC (e.g., 11F3Y, 12B4Y) to a major weapon system specific AFSC.

9.3.2.3.4. Change from one major weapon system AFSC to another major weapon system AFSC (e.g., 11A3Y to 11F3Y).

9.3.2.3.5. Change from one AFS to another (e.g., 1A0xx to 1A2xx)

9.3.2.3.6. Change in API code from non-flying duties to flying duties (e.g., API 3 to 6, API E to D).

9.3.2.3.7. Transfer an authorization from one MAJCOM, FOA, DRU, or joint agency to another.

Chapter 10

FOREIGN MILITARY SALES (FMS) MANPOWER

10.1. Why the AF Develops and Resources FMS Requirements. The Arms Export Control Act, 22 USC 2751 plus all sections after that which relate to that section and the Foreign Assistance Act of 1961, as amended, authorize the sale of defense articles and services. The DoD Appropriation and Authorization Acts include in the USAF statutory end strength ceiling manpower resources to support FMS. Although most FMS manpower is reimbursable, the Air Force programs the requirements to ensure coverage in the Future Years Defense Program. HQ USAF does not retain a “pool” of manpower authorizations available for new FMS programs.

10.2. When and How to Prepare Manpower Requirements Package (MRP). MAJCOMs, FOAs, and DRUs prepare a Manpower Requirements Package to justify support for an FMS case (AFMAN 16-101, Chapter 4, Section A, para 4.7). Use AFMSs whenever possible. If AFMSs don't apply, use alternative Air Force approved methods to determine requirements.

10.3. Manpower Classification. FMS manpower authorizations are full-time or part-time. Positions performing less than 10% FMS work are not considered FMS.

Use the following information to determine classification of required FMS positions.

10.3.1. Full-time positions perform FMS duties 90% or more of the available time.

10.3.2. Part-time positions perform both FMS and USAF workload. Part-time authorizations spend less than 90% (but more than 10%) of their available time supporting FMS.

10.3.3. Use Overhires for approved requirements when appropriate (surge or short term workload) FMS funding must be available.

10.4. Manpower Data System (MDS) Coding of FMS Manpower. Code FMS positions under [Table 10.1](#) and as follows:

10.4.1. Use Program Element Code (PEC) A2002 for full-time manpower reimbursed by direct case funds. See [Table 10.2](#) for appropriate shred.

10.4.2. Program the authorizations in the appropriate PEC for commands using part-time manpower authorizations to perform direct case workload.

10.4.3. Program manpower reimbursed by administrative surcharge funds in the appropriate major force program using a shred of "s."

10.4.4. Use PEC A1009A for manpower reimbursed by FMS administrative appropriations.

Table 10.1. FMS Air Force Remarks Codes.

A8	FMS Full Time (90-100% Effort)
F2	FMS Direct Case Full Time (90-100% Effort)
FA	FMS Direct Case (10-29% Effort)

FB	FMS Direct Case (30-49% Effort)
FC	FMS Direct Case (50-69% Effort)
FD	FMS Direct Case (70-89% Effort)
FE	FMS Direct Case (10-29% Effort) *
FF	FMS Direct Case (30-49% Effort) *
FG	FMS Direct Case (50-69% Effort) *
FH	FMS Direct Case (70-89% Effort) *
G2	FMS Admin. Full Time (90-100% Effort)
GA	FMS Admin. Full Time (10-29% Effort)
GB	FMS Admin. Full Time (30-49% Effort)
GC	FMS Admin. Full Time (50-69% Effort)
GD	FMS Admin. Full Time (70-89% Effort)
K2	FMS Accessorial Full Time (90-100% Effort)
KA	FMS Accessorial Full Time (10-29% Effort)
KB	FMS Accessorial Full Time (30-49% Effort)
KC	FMS Accessorial Full Time (50-69% Effort)
KD	Foreign Military Sales Accessorial Full Time (70-89% Effort)

*Use when authorization performs partial FMS admin. workload.

NOTE: Except where noted, codes for part-time efforts are used when authorizations perform partial USAF workload.

Table 10.2. Shreds for PEC A2002

A2002A	PROGRAM MANAGEMENT
A2002E	FMS FLIGHT TRAINING
A2002J	FOREIGN MILITARY FINANCING *
A2002J	FOREIGN MILITARY FINANCING *
A2002G	DEFENSE LANGUAGE INSTITUTE
A2002I	SERVICES
A2002K	FMS ENGINEERING SERVICES **
A2002T	ENGINEERING TRAINING & SERVICES SUPPORT
A2002V	DSAA TAFT

*USE FOR MILITARY AUTHORIZATIONS ONLY

**AT AERONAUTICAL SYSTEMS CENTER ONLY

Chapter 11

MANPOWER ESTIMATE REPORT (MER)

11.1. Purpose. The MER satisfies the Congressional requirement to submit manpower requirements of major acquisition programs to the Secretary of Defense (SECDEF). SECDEF reviews the manpower requirements prior to approving full scale engineering development or production and deployment.

11.2. MER Preparation. HQ USAF/XPMR prepares AF Form 1768, Staff Summary Sheet, for HQ USAF/XP approval and a memo for HQ USAF/XPM signature. The lead command prepares all remaining items.

11.2.1. Staff Summary Sheet. HQ USAF/XPMR coordinates the report within HQ USAF and the Secretariat. The staff summary sheet will list the commands responsible for developing the MER and gives a brief statement of requirements, offsets, and shortfalls.

11.2.2. Memorandum from HQ USAF/XPM to Undersecretary of Defense (Requirements and Resources). This memorandum transmits the Air Force report to OSD. The first paragraph cites the pending milestone decision and the legal mandate for the report. If the Air Force is the lead service for a multiservice report, reference the location of the other service reports within the Air Force input. The second paragraph summarizes the program, gives the full operational deployment (FOD) manpower requirements, and states the timing and size of any manpower shortfalls. Use a third paragraph, if needed, to describe the impact of any manpower shortfall on fielding the system.

11.2.3. Statement of Manpower Requirements. See [Attachment 8 \(Table A8.1.\)](#). This display covers all years from initial production of the system until FOD and includes five groupings (Operations, Maintenance, Support, Training, and Total). The Maintenance grouping includes organizational and intermediate maintenance. Under Support Grouping include depot maintenance, central logistics support, program office, Air Force plant representative office, contract administrative support, and associated base operating support (BOS) manpower for each element. Each grouping also includes a breakout for active officer, active enlisted, civilian, Air Force Reserve and Air National Guard Technicians, drill officer, drill enlisted, AGR officer, AGR enlisted, contractors and, a total. If technician and contractor requirements are part of the program, include a man-year total, which is a total of all categories, and a manpower total which excludes the contractors and technicians.

11.2.4. Program Synopsis. See [Attachment 8 \(Figure A8.1.\)](#). This paper provides decision makers a program summary that describes the system, shows deployment schedules, and explains the Operations, Maintenance, and Training concepts for the system.

11.2.5. Manpower Requirements Methodology and Rationale. See [Attachment 8 \(Figure A8.2.\)](#). This paper illustrates manpower requirements for Operations, Maintenance, Support, and Training by MAJCOM. Discuss each MAJCOM's requirement by category and the methodology used to estimate requirements as appropriate.

11.2.6. Command Requirements Detail. See [Attachment 8 \(Table A8.2.\)](#). For each MAJCOM, prepare a separate display of the manpower required for the new system. This display shows basic functions used to build requirements, parallels information in paragraph [11.2.5.](#), and projects the requirements by year from initial production to FOD.

11.2.7. Manpower Impacts by Command. See [Attachment 8 \(Table A8.3\)](#). This display summarizes requirements and offsets and is used for internal Air Force coordination of the MER. It should cover the same time period as the manpower requirements. Group the data by command, and treat AFRC and NGB as commands. Divide each group into required, offsets, shortfall, and contract and address officers, enlisted and civilians, except under contract. Total requirements here should match total requirements on the statement of manpower requirements. For required offset and shortfall, use the same eight manpower categories listed in paragraph [11.2.3](#).

DUNCAN J. MCNABB, Lt General, USAF
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Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****Abbreviations and Acronyms***

AAD—Advanced Academic Degree
ACR—Authorization Change Request
AFCQMI—Air Force Center for Quality & Management Innovation
AFMS—Air Force Manpower Standards
AFSC—Air Force Specialty Code
AGE—Aerospace Ground Equipment
AGR—Active Guard/Reserve
ANG—Air National Guard
CA—Commercial Activities
CME—Contract Manpower Equivalent
CPO—Civilian Personnel Office
CSAF—Chief of Staff of the Air Force
DC—Dental Corp
DoD—Department of Defense
DOPMA—Defense Officer Personnel Management Act
DRU—Direct Reporting Unit
FAC—Functional Account Code
FOA—Field Operating Agency
FMS—Foreign Military Sales
LCOM—Logistic Composite Model
MAF—Man-hour Availability Factor
MAJCOM—Major Command
M&Q—Manpower & Quality
MEP—Manpower Engineering Program
MER—Manpower Estimate Report
MNT—Manpower Type
MC—Medical Corp
MD—Maintenance Data Collection
MSI—Manpower Standards Implementation

PCS—Permanent Change of Station

PECI—Productivity Enhancement Capital Investment

SRD—Standard reporting Designator

TWCF—Transportation Working Capital Fund

UAF—Unit Authorization File

USAFR—United States Air Force Reserve

U.S.C.—United States Code

WMP—War Mobilization Plan

Terms

Commercial Activities Cost Comparison—The Office of Management and Budget (OMB) Circular A-76 sets strict guidelines for conducting the cost comparison. The first phase determines the requirement for Government performance. The second phase either directly converts the in-house function to contract or does a cost comparison. The cost comparison includes a performance work statement, the most efficient and effective organization of the in-house function, and a comparison of the in-house cost of operation to contractor bids.

Competitive Sourcing—Choosing the most efficient and effective method for receiving products and services in concert with mission, legal, and other requirements. Competitive sourcing is typically choosing between in-house accomplishment and competitive sourcing, OMB Circular A-76 cost comparison, privatization, etc. (see AFI 38-203)

Consultant Services—A service offered to Air Force managers and supervisors, at their request, that provides information needed to make good management decisions. Study products will vary based on the nature and scope of the consultation.

Contract Manpower Equivalent (CME)—The number of man-years required if in-house employees or a contractor work force perform a contracted workload at a specified level of performance.

End Strength—The count of Air Force military and civilian positions that the Air Force needs to have funded in each year of the Future Years Defense Program (FYDP) to accomplish all approved missions. End strength provides the basis for funded man-years within the personnel system, and provides a target for personnel plans, programs, and budgets. End strength is a resource provided to support approved force structure, programs, or missions. End strength changes do not drive force structure or missions changes; they are tied to programmatic increases and decreases in force structure or mission. FYDP end strength is allocated to commands by program element code and category.

Future Years Defense Program (FYDP)—The official document and database that summarizes the Secretary of Defense approved plans and programs for the Department of Defense. It contains manpower end strength.

Management Study—An analysis of an organization's products and services, customers, suppliers, processes, metrics and resources for the purpose of developing the most efficient organization (MEO). The MEO is the in-house organizational and product/service task structure which best meets the requirements of the performance work statement (PWS) while using minimal amount of resources.

Man-hour—A unit of measuring work. It is equivalent to one person working at a normal pace for 60 minutes, two people working at a normal pace for 30 minutes, or a similar combination of people working at a normal pace for a period of time equal to 60 minutes.

Man-hour Availability Factor (MAF)—The average number of man-hours per month an assigned individual is available to do primary duties. Required man-hours are divided by the MAF times the overload factor to determine the manpower requirement.

Manpower—A critical resource that supports an approved program. It is not a program by itself and should not be manipulated separately from the program it supports.

Manpower Authorization—A funded manpower requirement with detail that defines the position in terms of its function, organization, location, skill, grade, and other appropriate characteristics that commands use to extend end strength manpower resources to their units.

Manpower Data System (MDS)—A manpower database containing all attributes applied to authorizations and requirements. For example, functional account codes, AF specialty codes, program element codes, personnel accounting system codes, etc.

Manpower Determinant—A means of quantifying manpower requirements. Determinants may cover a wide variety of methodologies including but not limited to manpower standards, models, and guides.

Manpower Requirement—A statement of manpower needed to accomplish a job, workload, mission, or program. There are two types of manpower requirements: funded and unfunded. Funded manpower requirements are those that have been validated and allocated. Unfunded requirements are validated manpower needs but deferred because of budgetary constraints.

Manpower Standard—A quantitative expression representing manpower requirements in response to varying levels of workload. A standard also includes a description of the workload, associated conditions on which the standard is built, a grade and skill level table, approved variances, and a product/service task analysis summary.

Manpower Standard Study—Major study categories include:

1. Description of “core” products/services.
2. Prioritized list of products/services.
3. Manpower cost (“price tag” in fractional manpower) of each core product/service as it is to be produced/performed in peacetime or wartime.
4. Manpower standard (model) for quantifying manpower needs for operations larger or smaller than the core for peacetime or wartime mission performance.
5. List of variances based on unique environmental, mission, or technological factors.

Man-Year Equivalents—The number of productive man-hours required per year to equate to one Contract Manpower Equivalent (CME). Man-Year Equivalents sometime vary based on the type of contract. Man-Year Equivalents by category are as follows:

1. Advisory and Assistance Services Contracts = 1764 man-hours per year
 - a. Based on MAF of 147.

2. Federally Funded Research & Development Center (FFRDC) Contracts = 1810 man-hours per year
 - a. Based on MAF of 150.83.
3. Other Service Contract not list above = 1776 man-hours per year
 - a. Based on MAF of 148.

Military Essential—Positions that directly contribute to prosecution of war (combat or direct combat support), exercise Uniform Code of Military Justice authority, are required by law, are military due to custom or tradition, are needed for overseas rotations, or require a skill not available in civilian resources. Other workloads are not military essential and should be performed by in-service civilians or contract services.

Organization Reengineering Study— A holistic analysis of an organization’s mission and structure, products and services, customers, suppliers, tasks, metrics, resources, and operating environment for the purpose of developing the most efficient and effective delivery of the products and services needed to meet mission requirements.

Outside the Air Force—Positions in the Manpower Data System with a 7XXX functional account code and defined as: activities over which the Air Force does not exercise control; activities jointly manned by the sister services or by foreign governments and the United States, including HQ Joint/Unified and Specified Commands; activities of other Military Departments; and US Government agencies outside the Department of Defense.

Overload Factor—During a normal workweek, Air Force work center will work up to approximately 30 minutes per day per manpower requirement above the normal workday man-hours before an additional requirement will be recognized. See paragraph 2.3.

Performance Measures (Metrics) Study—Major study products include organizational efficiency and effectiveness measures.

Prisoners—An alternate source of manpower that commands can use to augment the labor force and satisfy unfunded requirements. Commands will not use prisoners to reduce military or civilian authorizations or contract resources. Commands will use prison labor only to satisfy unfunded requirements and will subtract them from the unfunded requirement.

Reimbursable Positions—All positions coded in the Manpower Data System under program element 91519F.

Reengineering—A holistic, methodical approach to reviewing the products and services of an enterprise, the associated processes and tasks, and the resources to accomplish them so as to construct an organization that matches people and available resources to product/service process and track in the best, most efficient way to meet customer requirements

Service Contract—A contract for a task or service rather than furnishing an end item of supply.

Unfunded Mandate—A workload that a unit is required to perform and is not accompanied by funded manpower authorizations. Unfunded mandates may result from: manpower standards that arbitrarily disallow or otherwise do not address current Air Force-wide workloads, unfunded variances, workload transferred to others without the associated manpower, requirements in Air Force Instructions and functional guidance, etc.

Unit Manpower Document (UMD)—A detailed manpower listing, drawn from the manpower data system, reflecting the distribution of manpower allocations into a finite structure of authorizations and requirements by work center.

Variance—A condition that adds to or subtracts from the core workload or impacts the way the work is performed, the grade of a position, or the resource (mil/civ) used to fill the position. Variances result from environmental, mission, or technological differences and can be negative, positive, or neutral.

NOTES:

1. Saturday, Sunday, or compensatory weekday for weekend workday.
2. Applies to all CONUS and overseas locations working a normal 40-hour workweek. This data is based on the Aug 02 Peacetime Military MAF Update Study.
3. Alaska and Hawaii are included in the CONUS civilian computation. The civilian MAF also includes United States Code Title 32 civilian assigned to Reserve units. This data is based on the Aug 2002 Peacetime Civilian MAF Update Study.
4. There are currently no locations in the world where US direct-hire civilians are working an extended workweek.
5. Special absences for civilians include registration or voting, blood donations, military funerals, court leave, etc.
6. Monthly Man-hour Availability Factor (MAF) to be used for manpower computations.
7. The MAFs for Wartime Emergency and Wartime Surge have been truncated to the nearest whole number. This data is based on Aug 1999 Military Wartime and Contingency MAF Study. There is no current Civilian Wartime/Contingency MAF.
8. Overload factors for various workweeks are provided at para [2.3](#).

| **Table A2.2. Special Air Force Workweeks and Man-hour Availability Factors.**

	Workweek (in hours)	Monthly Man-hour Availability Factor (MAF)	Year Approved
Fire Fighters	72	277.0	2003
USAF Academy Faculty	45	178.4	1992
Foreign National Civilians (by country)			
Germany			
Rheinland-Pfalz	38.5	126.31	1991
	40-43	138.07	1991
	43.5-47	153.16	1991
	48-50	166.18	1991
	51-55	184.75	1991
	44-50 (6-day workweek)	156.68	1991
Hessen	38.5	127.0	1991
	40-45	147.62	1991
	47-54	171.32	1991
	48.51 (6-day workweek)	166.71	1991
Berlin	38.5-40	132.5	1991
	41.5-43	145.36	1991
	47	164.79	1991
Fire Protection	58.88	208.47	1991
Greece	39	139.62	1985
	40	142.86	1985
	42	152.95	1985

	Workweek (in hours)	Monthly Man-hour Availability Factor (MAF)	Year Approved
Italy	40	136.5	1987
	67.4	246.1	1987
	72	263.4	1987
Japan	40	149.0	1978
Korea	48	188.4/145.2	1978
Netherlands	38	125.5	1990
Philippines	40	149.0	1978
Portugal (Azores)	40	143.3	1979
	44	153.8	1979
Spain	40	139.6	1990
	72	275.15	1990
Turkey	45	148.63	1987
	48	158.9	1987
United Kingdom	39 (non-industrial)	143.31	1986
	42 (industrial)	135.53	1994

Attachment 3**AF FORM 81**

A3.1. AF Form 81, Colonel Position description. Use this form to describe, justify, and certify colonel requirements.

A3.2. General Guidelines for Completing AF Form 81.

A3.2.1. Use only the allocated spaces. Stay within each data element space. Do not attach additional sheets except for organization charts

A3.2.2. Avoid filling in an item solely because it's available. For example, positions needing a high level of special experience, such as a scientist, may have little or no management responsibility.

A3.2.3. Paraphrasing or repeating an item title wastes space and is of no benefit.

A3.2.4. Be specific. Avoid generalizations. Instead of "frequent executive level discussions on multi-billion dollar programs," state "semiannual briefing to division level in Office of Management and Budget and General Accounting Office for research and development programs of \$5.3 billion."

A3.2.5. Do not waste space on long explanations. It is accepted that a subordinate acts in the absence of a commander or next higher staff officer.

A3.2.6. Use active verbs. Be concise

A3.3. Specific instructions for completing AF Form 81.

A3.3.1. Position Title. Use the duty title; do not use the UMD title unless it duplicates the formal duty title.

A3.3.2. Unit or Activity:

A3.3.2.1. Field Units. Fill in the wing, group, squadron, etc.

A3.3.2.2. Headquarters Units. Fill in the directorate, division, or comparable organization level and the headquarters designation.

A3.3.3. Base and Location. Use the standard base address; for example, Randolph AFB, TX, or Ramstein AB, GE. Use APO designation only for classified locations.

A3.3.4. Reserved (Multiple Position description/core personnel document Numbers). **DO NOT USE THIS SPACE. USING A SINGLE PD FOR MULTIPLE POSITIONS IS NOT PERMITTED.**

A3.3.5. MAJCOM. Use your command's three-letter code for MAJCOM identity.

A3.3.6. Position Number. Use three digits to indicate sequence control number. The MAJCOM ID code and position number are the means of identifying position description/core personnel documents. Begin with the number 001 and continue with sequential numbers through 999. Do not duplicate numbers for any reason. Use the position number assigned to the position from year to year. All requests for new colonel requirements will receive new numbers.

A3.3.7. AFCQMI ID No. Leave blank.

A3.3.8. Function. Enter the four-digit functional account code (FAC) from the UMD.

A3.3.9. Air Force Specialty Code (AFSC). Enter AFSC prefix (if applicable), the four-digit AFSC, and the AFSC suffix (if applicable). Use a maximum of seven characters.

A3.3.10. Organization Structure Code (OSC). Enter all digits of the UMD OSC.

A3.3.11. Type Position. Leave blank.

A3.3.12. Functional Category. Enter the functional category from the UMD.

A3.3.13. Short Position Title and Unit Designation. Enter the abbreviated position title, including unit or activity designation. Limit this entry to 25 characters and spaces. Use standard Air Force abbreviations.

A3.3.14. Position of Rater and Additional Rater. List the UMD authorized grade and the duty title.

A3.3.15. Principal Subordinates. List the positions that report directly to and are rated by the incumbent. Subordinates can only report to one person (to the director but not the deputy director, or to the deputy director but not the director). Include title, rank or grade (GS, WG, or ES) for civilians.

A3.3.16. Required Contacts. List the most important contacts in and outside the chain of command (other MAJCOM headquarters, OSD, State Department, foreign governments, etc.). State the specific level of contact with the agency involved (Vice Commander, DCS/Director/Logistics, Public Affairs, local Chief of Police).

A3.3.17. Authority. State the highest authority or authorities vested in the position; for example, "signs for Chief of Staff," "approves war plans," etc. Do not list inherent authority; such as, "approves leave." Concentrate on authority that would justify a colonel. State these authority parameters:

A3.3.17.1. Vertical. State the closeness of supervisor, functional independence, and diversity of subordinate units, staff versus command positions, and if the position must deal with new jobs without direct supervision.

A3.3.17.2. Horizontal. State the degree to which the position can take action without the need to have the coordinated concurrence of horizontal positions. Certifying officials should make sure that each position in the same chain of command has its own defined area of authority.

A3.3.18. Resources. State in measurable terms the authorized people and financial resources for which the position is accountable and has direct signatory control. Do not include values of real property. NOTE: Only a commander or vice commander of an operational wing receives credit for aerospace vehicle resources, which is stated in terms of primary aircraft authorized (PAA).

A3.3.19. Most Difficult Problems. List examples that are typical of the "most complex" situations encountered in this position. State the level of issues addressed by the position.

A3.3.20. Supplemental Information. Use this area for "unusual" conditions not described elsewhere. For example, if the incumbent of the position serves in a dual capacity, list the secondary position here. Do not use this area for continuation from other blocks.

A3.3.21. Special Training and Work Experience. State whether work experience as a rated officer is mandatory or desired. If applicable, list a specific area such as bombardment, airlift, or fighters. In all cases of special experience, concentrate on experience required, not knowledge. However, if special training courses--such as training with industry--are required or desired, list the specifics. DO NOT list: general AF courses of study such as Squadron Officers School, Air War College, etc.; education obtained in college, universities, or professional schools unless required for the position and indicated

in the Advanced Academic Degree column of the UMD. Leave the block blank if neither “rated” nor “other” is appropriate.

A3.3.22. Communication Skills. State the nature, type, and extent of necessary written and oral skills. Consider the variety and complexity of information as well as the organization level of individuals and agencies involved.

A3.3.23. Judgment and Decision Making. State the importance of judgment and independence on decisions. State the degree of supervision and nature of guidance needed in terms of scope and position independence.

A3.3.24. Planning. State the extent of required planning, both short-term and long-range. Include the scope and significance of the planning.

A3.3.25. Management. State executive and managerial skills required in the job.

A3.3.26. Certification. The MAJCOM, FOA, or DRU Director of Plans, or designated individual, signs the form, certifying the position is a valid colonel requirement.

Attachment 4**SERVICE-TYPE CONTRACTS INCLUDED OR EXCLUDED IN THE CONTRACT
MANPOWER EQUIVALENT DEVELOPMENT PROCESS****A4.1.** Include contracts that:

- A4.1.1. Operate, maintain, repair, overhaul, rehabilitate and/or modify Air Force equipment.
- A4.1.2. Maintain, repair and/or alter Air Force real property.
- A4.1.3. Provide architectural-engineering master planning.
- A4.1.4. Engineer and/or install equipment.
- A4.1.5. Operate facilities and/or systems.
- A4.1.6. Provide housekeeping or base services.
- A4.1.7. Operate and/or maintain government-owned utility systems.
- A4.1.8. Provide demilitarization and/or disposal services.
- A4.1.9. Train in-service personnel, including dependents.
- A4.1.10. Provide medical and/or legal services.
- A4.1.11. Provide photography, duplicating, or copying services.
- A4.1.12. Provide special studies and/or related services, including consultant services.
- A4.1.13. Design and/or test new weapons systems, techniques and equipment.
- A4.1.14. Provide engineering and/or technical services.
- A4.1.15. Provide services under industrial funds.
- A4.1.16. Operate and/or maintain leased or rented equipment and facilities.
- A4.1.17. Provide personal services.
- A4.1.18. Acquire services via Depot Maintenance Activity Group (DMAG) Funds.
- A4.1.19. Acquire services via Supply Maintenance Activity Group (SMAG) Funds.
- A4.1.20. Provide Advisory and Assistance Services (A&AS) including support provided by Federally Funded Research and Development Centers.

A4.2. Exclude service-type contracts that:

- A4.2.1. Acquire Air Force equipment.
- A4.2.2. Operate government-owned industrial facilities incidental to a production contract.
- A4.2.3. Engineer or install equipment incidental to a production contract.
- A4.2.4. Construct facilities or provide engineering and related services financed by military construction appropriation.

A4.2.5. Purchase supplies (except the labor portion of Contractor Operated Civil Engineer Supply Store (COCESS) and Contractor Operated Parts Store (COPARS), utilities and commodities.

A4.2.6. Lease or rent equipment and facilities.

A4.2.7. Acquire military off-duty education programs.

A4.2.8. Acquire "fare" surface or water off-base transportation.

Attachment 5

FUNCTIONS OF AGR AUTHORIZATIONS

A5.1. 10 USC 175A(9). Military Executive, Reserve Forces Policy Board. A general or flag officer designated by the chairperson of the board and approved by the Secretary of Defense. The Military Executive is the military adviser to the chairperson and the executive officer of the Board. This is a non-voting position. Each military department nominates individuals for the position.

A5.2. 10 USC 10211. Within numbers and grades as the secretary of the department may prescribe, Guard and Reserve officers may be on extended active duty (other than for training) as advisors at the seat of government and at headquarters responsible for reserve affairs, to participate in preparing and administering the policies and regulations affecting those reserve components

A5.3. 10 USC 12310. Officer and enlisted personnel called to active duty to support Guard or Reserve activities for more than 360 days.

A5.4. 10 USC 10502. Chief of the National Guard Bureau. Advises Army and Air Force Chiefs of Staff on National Guard matters and heads the channel of communications between the two departments and several states.

A5.5. 10 USC 8038. Chief of Air Force Reserve (major general). Serves as principal advisor to the Air Force Chief of Staff on all Air Force Reserve matters.

A5.6. 10 USC 10305(h). No fewer than five officers from both ANG and USAFR (a total of ten) officers serving on the Air Staff with the Air Reserve Forces Policy Committee. In all other ways, the duties and responsibilities of a 10 USC 8021 officer are the same as a 10 USC 10211 officer. These authorizations are usually colonels.

A5.7. 10 USC 12402. ANG officers below brigadier general on duty in the National Guard Bureau who take part in developing, administering, and coordinating all programs, policies, principles, concepts, and plans for the National Guard. These officers also assist states in organizing and operating National Guard units. The number of ANGUS officers below the grade of brigadier general cannot exceed 40 percent of the number of Air Force officers in that grade authorized for duty in that Bureau. A tolerance limit of one authorization per grade will be allowed to compensate for the small number involved as long as the over-all 60 to 40 ratio is not exceeded. See also 10 USC 10505 & 10506.

A5.8. 32 USC 708. US Property and Fiscal Officer. A National Guard Officer appointed in a state to safeguard and dispose of US funds and property belonging to the National Guard of that state. Authorized grade can be above colonel.

Attachment 6**INSTRUCTIONS FOR AGR POSITION REQUEST****A6.1. Format.**

- A6.1.1. General Information.
- A6.1.2. Command. Self-explanatory.
- A6.1.3. Unit or Organization. Self-explanatory.
- A6.1.4. PAS Code. Self-explanatory
- A6.1.5. Organization Structure Code (OSC). Self-explanatory.
- A6.1.6. Base or Location. Self-explanatory.
- A6.1.7. Air Reserve Forces Component. Identify the Reserve Component (ANG/AFR) desired.
- A6.1.8. Date Position Established. This data applies only to changes in existing authorizations. Use the date of submission on a request for a new position.
- A6.1.9. AFSC. Self-explanatory.
- A6.1.10. Authority. Applicable statute.
- A6.1.11. Authorized Grade. Show the grade to be listed in the manpower authorization file, or the grade being requested.
- A6.1.12. Aircrew Position Identifier (API). For rated AFSCs, state the proper API code (not applicable for enlisted positions).
- A6.1.13. Position Number. Show the position number listed in the manpower authorization file, when requesting changes to existing positions.
- A6.1.14. Duty Title. Self-explanatory.

A6.2. Supplemental Information.

- A6.2.1. Supervisor. Provide the position or duty title, unit, organization, authorized grade, AFSC and base or location of the reporting official for subject position.
- A6.2.2. Supervises. Same data as above for subordinates supervised by the AGR officer or airman.
- A6.2.3. Prime Purpose. Summarize in one sentence, if possible, the principal reason for this position.
- A6.2.4. Grade. Provide rationale and analysis for requested grade.
- A6.2.5. AFSC. Provide rationale and analysis for requested AFSC.
- A6.2.6. Scope of Responsibility. Address and list number and types of Air Reserve Forces to include manpower augmentation authorizations and Individual Mobilization Augmentees gained by the MAJ-COM or FOA. Describe the scope of major responsibilities inherent in implementing the total force policy. Do not address future or projected responsibilities that will take effect more than 12 months from the date of the request.

A6.2.7. Qualifications or Knowledge. Identify aeronautical rating, educational background, security clearance, special experience, or special qualifications desired.

A6.2.8. Air Reserve Forces Component. Identify the component required. If the position is responsible for both components, the position may be rotated. As a rule, establish the position equal to the component that constitutes the majority of the workload.

A6.2.9. Workload or Manpower Relationship. Explain if the workload is new or increased. Describe the related management actions taken to accommodate the workload. Identify monthly man-hours by responsibility grouping that the position will accomplish. Identify other AGR personnel authorized and briefly establish their working relationship with the new position.

A6.2.10. Organization Chart. Attach an organizational chart showing the proposed placement of the position and all active and AGR positions one level above below the placement of the position.

A6.2.11. Position description/core personnel document. The position description/core personnel document is the major vehicle used to validate a requirement. Make the description detailed enough to identify the duties and responsibilities, and state in precise terms how the incumbent will discharge his or her duties. This section expands the information in scope of responsibility and workload or manpower relationship paragraphs.

Attachment 7**INSTRUCTIONS FOR COMPLETING AF FORM 480, AIRCREW AFSC / ACTIVE FLYING JUSTIFICATION**

- A7.1. Command:** Enter MAJCOM, FOA, DRU, or joint agency.
- A7.2. Effective Period:** Enter the effective period of the position, (i.e., *From:* FQ 944 *To:* FQ 981). Use “999” in the ‘To’ block for positions that will not expire.
- A7.3. Date of Request:** Enter the date of the requested change/addition in this format: YYYYMMDD.
- A7.4. Installation:** Enter the name of the installation where the position is or where it will be.
- A7.5. Organization Number, Kind, Type, Detachment and Operating Location:** Enter the full organization number and title.
- A7.6. Organization Structure Code (OSC):** Enter the appropriate OSC.
- A7.7. Functional Account Code (FAC):** Enter the appropriate FAC.
- A7.8. Duty Title:** Enter duty position title that clearly identifies the individual position.
- A7.9. API:** Enter the appropriate API from paragraph [9.1.1](#).
- A7.10. Grade:** Enter the authorized grade.
- A7.11. Prefix/AFSC:** Enter the AFSC and prefix from AFMAN 36-2105 or AFMAN 36-2108 as applicable.
- A7.12. SEI:** Enter Special Experience Identifier from AFMAN 36-2108 as applicable.
- A7.13. Position #:** Enter the position number.
- A7.14. Program Element Code (PEC):** Enter the appropriate PEC.
- A7.15. Description:** Describe peacetime and wartime duties by pilot, navigator, non-rated officers, civilians and enlisted. Write the description so that someone not familiar with the work center can understand its function and the need for rated/non rated aviator skills. Include the amount of expertise and the size of the work center. If the position requires active flying duties, provide detailed justification. If no wartime duties are applicable, then describe the position as wartime available.
- A7.16. Directives:** List the directive that directly supports the need for the aviator skill and the major weapon system experience.

A7.17. Coordination Blocks: These blocks are made available for use when needed. There is no requirement to have all blocks filled or used.

All entries are mandatory except: DET, OL, PREFIX and SEI

Figure A7.1. AF Form 480, Aug 98, AIRCREW AFSC/ACTIVE FLYING JUSTIFICATION.

AIRCREW AFSC / ACTIVE FLYING JUSTIFICATION			COMMAND	EFFECTIVE PERIOD		
			AETC	FROM	974	TO
					999	
INSTALLATION	ORG NUM	ORG KIND	ORG TYPE	DET	OL	
Randolph	0000	AET	CM	0000		
DUTY TITLE		API	GRADE	PREFIX	AFSC	SEI
Enl Aircrew Pipeline Tng Mgr		E	MSgt		1A471	
<p>PROVIDE A BRIEF DESCRIPTION TO INCLUDE RATIONALE WHY POSITION REQUIRES INCUMBENT TO BE RATED / NON-RATED AVIATOR. INCLUDE SIZE OF THE WORK CENTER. INCLUDE ACTIVE FLYING JUSTIFICATION FOR API CODE 6, 8, B OR D POSITIONS.</p> <p>Position requires a senior NCO (MSgt) with Command and Control experience (1A471) to assist the AETC Training Manager. Will oversee and direct changes for a combined total of 1,000 non-prior service student eleven separate training courses annually. Serves on AETC MAJCOM staff, providing senior leadership w information, recommendation, and solutions to enlisted training issues. Coordinates with MAJCOM trainin and AETC training centers on issues affecting the expedient and efficient training of enlisted aircrew memb USAF, HQ AFPC, and HQ AETC staff to ensure AF training objectives are met. Builds schedules for stud training courses. Monitors training flow, identifies problems in production, and implements approved corre issues. Conducts enlisted aircrew recruiting. Briefs training initiatives at Utilization and Training Workshop</p>						
LIST THE AF DIRECTIVES WHICH LEND SUPPORT (Include paragraph number)						
AFI 11-412, para 2.11						
MAJCOM COORDINATION				OTHER COORDINATION		
DO	DP	XP				

Attachment 8

EXAMPLE OF REQUIRED DOCUMENTATION FOR MANPOWER ESTIMATE REPORTS

Table A8.1. Statement of Manpower Requirements

	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
OPERATIONS							
ACTIVE OFF	112	170	252	358	504	676	824
ACTIVE ENL	173	215	269	436	565	722	900
CIVILIAN	20	24	26	53	68	84	105
TECHNICIANS	15	28	48	90	133	160	195
DRILL OFF	65	105	311	493	643	872	1000
DRILL ENL	63	93	280	446	541	741	874
AGR OFF	0	0	4	4	4	8	8
AGR ENL	0	0	25	25	25	50	50
CONTRACTORS	0	0	0	0	0	0	0
MAINTENANCE							
ACTIVE OFF	10	16	27	40	58	74	90
ACTIVE ENL	461	782	1295	1838	2690	3427	4113
CIVILIAN	42	71	113	155	230	295	350
TECHNICIANS	63	106	329	542	730	1011	1174
DRILL OFF	5	8	20	28	37	46	55
DRILL ENL	247	418	1012	1484	2045	2669	3085
AGR OFF	0	0	0	0	0	0	0
AGR ENL	0	0	17	17	17	34	34
CONTRACTORS	0	0	0	0	0	0	0
SUPPORT							
ACTIVE OFF	223	212	192	163	162	158	154
ACTIVE ENL	382	387	422	342	455	557	653
CIVILIAN	1227	1384	1444	1487	1688	1846	2059
TECHNICIANS	9	13	93	128	145	229	251
DRILL OFF	0	0	46	73	99	142	174
DRILL ENL	0	0	291	427	530	819	924
AGR OFF	0	0	2	2	2	4	4
AGR ENL	0	0	16	16	16	32	32
CONTRACTORS	17	26	26	26	26	26	20

TRAINING							
ACTIVE OFF	1	73	86	94	107	122	133
ACTIVE ENL	168	587	889	991	1054	1056	1072
CIVILIAN	8	68	98	102	105	105	105
TECHNICIANS							
DRILL OFF							
DRILL ENL							
AGR OFF							
AGR ENL							
CONTRACTORS	9	91	100	100	114	114	127
ACTIVE OFF	346	471	557	655	831	1030	1201
ACTIVE ENL	1184	1971	2875	3607	4764	5762	6738
CIVILIAN	1297	1547	1681	1797	2091	2330	2619
TECHNICIANS	87	147	470	760	1008	1400	1620
DRILL OFF	70	113	377	594	779	1060	1229
DRILL ENL	310	511	1583	2357	3116	4229	4883
AGR OFF	0	0	6	6	6	12	12
AGR ENL	0	0	58	58	58	116	116
CONTRACTORS	26	117	126	126	140	140	147
MAN-YEAR TOTAL	3320	4877	7733	9960	12793	16079	18565
MANPOWER TOTAL*	3207	4613	7137	9074	11645	14539	16792

*Excludes contractors and ARF technicians (technicians also fill drill authorizations)

Figure A8.1. Example of Program Synopsis.

SYSTEM DESCRIPTION

- Briefly describe the system, its capabilities, its intended uses, etc.
 - Program force structure planned for xxx PAA (xxx CC, xx TF)
- Initial production planned for FY xx
Initial Operational Capability (IOC) planned for FY xx
Full Operational Deployment (FOD) planned for FY xx
Manpower estimate based upon the following schedule (PAA):

	FY 94	95	96	97	98	99	00
CMD1	13	22	35	47	70	78	92
CMD2	0	0	0	0	0	11	14
CMD3	0	0	6	20	24	32	42
Training	0	8	12	12	12	12	22

TOTAL	13	30	53	79	106	133	160
-------	----	----	----	----	-----	-----	-----

OPERATIONS CONCEPT

-Briefly describe how the system will be deployed

CMD	Number of Squadrons	PAA/SQDN	TOTAL PAA
CMD1	4	23	92
CMD2	1	14	14
CMD3	2	21	42

- Utilization rates

- Peacetime: xx.x sorties/month
- Sustained wartime: x.x sorties/day
- Surge wartime: x.x sorties/day

MAINTENANCE CONCEPT (Following are examples of comments that could be used to explain requirements)

- Base level equipment maintenance performed at main operating bases
- Maintenance at forward operating bases limited to equipment repair
- Two-level maintenance concept employed to extent possible
- A decision tree analysis/depot maintenance inter-service process used to determine depot-level maintenance source of repair

TRAINING CONCEPT

- Instructional System Development (ISD) analysis used to determine maintenance training requirements and equipment
 - Training conducted at technical training centers and field training detachments
 - Primary air crew training conducted by an active duty training squadron with xx PAA
 - Contracted air crew Training System (simulator) operations and maintenance

Figure A8.2. Example of Manpower Requirements Methodology and Rationale.

OPERATIONS:

		CMD1	CMD2	CMD3	TOTAL
	Crew Members	1356	360	984	2700
	Overhead	708	116	557	1381
	Security	131	92	66	289
Total		2195	568	1607	4370

MAINTENANCE:

		CMD1	CMD2	CMD3	TOTAL
	Maintenance	5608	742	2780	9130

-Total requirement based on Logistics Composite Model (LCOM) study of sustained wartime requirements (See XXX LCOM Study dated xx/xx/xx)

SUPPORT:

-AFMC

	---Distribution	197
	---Material Management	390
	---Cataloging and Standardization Center and Logistics Center	3
	---Contracting and Manufacturing	104
	---Depot Maintenance	712
	---Base Operating Support	40
	---Contract Logistics Support for Simulators	13*

*Contract Manpower Equivalents

-CMD1

	---HQ Staff, Test and Evaluation, and Site Activation Task Force	25
	---Software support	58
	---Contracted software support	7*
	---BOS for Mission Requirements (O&M)	1084

*Contract Manpower Equivalents

-CMD2 and CMD3

TRAINING:

-Maintenance training manpower requirements developed by AETC using estimated trained personnel requirements and course parameters; BOS added using standard Air Force factors

	---Technical training instructors	
	---Student pipeline authorizations	215
	---BOS	29

-Air crew training squadron manpower (O&M) developed by CMD1 based on comparison with similar systems

	---Crew members	72
	---Training squadron overhead	30
	---Security	6
	---Maintenance	554
	---Student pipeline authorization	129
	---BOS for training Squadron	92
	---Contracted simulator Operations and Maintenance	146*
*Contract Manpower Equivalents		

Table A8.2. Example of Requirements Detail.

COMMAND REQUIREMENTS DETAIL							
	FY 94	FY 95	FY 96	FY 97	FY 98	FY 99	FY 00
AIR CREWS							
ACTIVE OFF	78	132	210	282	420	468	552
ACTIVE ENL	39	66	105	141	210	234	276
WING STAFF							
ACTIVE OFF	34	38	42	76	84	84	118
ACTIVE ENL	90	105	120	210	240	240	330
CIVILIAN	14	15	16	30	32	32	46
SECURITY							
ACTIVE ENL	44	44	44	63	82	82	100
MAINTENANCE							
ACTIVE OFF	8	13	21	29	43	48	57
ACTIVE ENL	354	600	955	1283	1911	2129	2511
CIVILIAN	41	69	110	146	218	243	286
BOS							
ACTIVE OFF	2	4	6	10	14	16	19
ACTIVE ENL	65	99	152	211	304	334	402
CIVILIAN	30	46	66	93	132	145	174
CONTRACTORS	5	10	15	20	20	20	20
TOTALS							
ACTIVE OFF	122	187	279	397	561	616	746

ACTIVE ENL	592	914	1376	1908	2747	3019	3619
CIVILIAN	85	130	192	269	382	420	506
CONTRACTORS	5	10	15	20	20	20	20
MAN-YEARS	804	1241	1862	2594	3710	4075	4891

CMD3							
CMD4							
TOTALS							
-REQUIRED							
ACTIVE OFF	996	335	436	552	733	942	118
ACTIVE ENL	808	1787	2694	2543	4091	5678	6643
CIVILIAN	206	1074	1238	1343	1596	1813	2089
TECHNICIAN			30	30	30	60	60
DRILL OFF			160	160	160	320	320
DRILL ENL			650	650	650	1300	1300
AGR OFF			3	3	3	8	6
AGR ENL			23	23	22	44	44
-FUNDED							
ACTIVE OFF	177	188	216	262	333	449	579
ACTIVE ENL	759	1099	1582	2199	2527	4063	5091
CIVILIAN	483	664	785	890	1083	1474	1737
TECHNICIANS			30	30	30	60	60
DRILL OFF			160	160	160	244	244
DRILL ENL			650	650	650	1068	1068
AGR OFF			3	3	3	6	6
AGR ENL			21	21	21	42	42
-DELTA							
ACTIVE OFF	29	146	210	290	401	493	529
ACTIVE ENL	239	688	1112	1354	2154	1615	1552
CIVILIAN	325	410	443	450	513	339	343
TECHNICIAN			0	0	0	0	0
DRILL OFF			0	0	0	76	76
DRILL ENL			0	0	0	232	232
AGR OFF			0	0	0	0	0
AGR ENL			1	1	1	2	2
-CONTRACT							
MAN-YEARS	26	117	126	126	140	140	147

Attachment 9

IC 2001-1 TO AFI 38-201, DETERMINING MANPOWER REQUIREMENTS

8 NOVEMBER 2001

SUMMARY OF REVISIONS

This revision incorporates Interim Change IC 2001-1. This change expands previous guidance concerning development of Contract Manpower Equivalents (CME) to outline responsibilities at HQ USAF, MAJCOM, and Center/Installation levels. Standard CME development methodologies are introduced for the purpose of creating more consistency throughout the Air Force. A “[” indicates revised material since the last edition.

Chapter 6

CONTRACT MANPOWER EQUIVALENTS (CME)

6.1. Objective. Manpower and Organization (MO) functions must accurately define our contract manpower equivalent (CME) requirements for service-type contracts. CMEs apply to services listed in [Attachment 4](#) of this instruction.

6.2. Purpose. CME computation and documentation provide the Air Force with an estimate of the size of the contractor workforce, as part of the total Air Force manpower requirements documented in the Manpower Data System (MDS) supporting the Air Force mission. The methodology in this chapter will be used to compute and validate Air Force CME requirements for applicable service-type contracts.

6.3. Roles and Responsibilities. The following roles and responsibilities apply:

6.3.1. HQ USAF:

6.3.1.1. HQ USAF/XPM provides MAJCOMs with CME computation and documentation policy to ensure CMEs are properly entered in the MDS. HQ USAF/XPM serves as the primary Air Force point of contact for consolidating and reporting CME information to external agencies.

6.3.1.2. SAF/AQC provides guidance to MAJCOM/Directors of Contracting regarding the policy for standard CME computation and documentation, as it applies to contracting activities throughout the Air Force.

6.3.1.3. HQ USAF/IL provides guidance to MAJCOM functional managers to ensure the policy for standard CME computation and documentation as it applies to Depot Maintenance Activity Group (DMAG) and Supply Maintenance Activity Group (SMAG) activities.

6.3.1.4. HQ USAF/FM provides guidance to assist MAJCOM and Wing Manpower and Contracting offices in their efforts to identify and quantify CMEs based on budget expenditures (ref. para. [6.5.1.3.](#)).

6.3.1.5. 11WG/XPM implements CME computation and documentation policy for the 11 WG, Headquarters United States Air Force, FOAs, DRUs, Air Force elements in DOD agencies, and unified commands for which it provides manpower support. 11WG/XPM ensures that current CMEs are loaded in the August end of month MDS file.

6.3.2. Major Commands (MAJCOM).

6.3.2.1. MAJCOM/XPMs, in coordination with MAJCOM/Directors of Contracting, implement and distribute to subordinate manpower offices CME computation and documentation policy. MAJCOM/XPMs also ensure MDS projects from base level and MAJCOM input reflect current CME requirements (i.e., headquarters and wing level) and are loaded in the August end of month MDS file.

6.3.3. Center/Installation.

6.3.3.1. The contracting, functional managers, civilian personnel, and financial management offices play vital roles in the CME validation process. The MO offices, in coordination with these agencies document CME data for applicable service-type contracts on the base. Specific responsibilities are outlined in the following paragraphs:

6.3.3.2. Manpower and Organization Office.

6.3.3.2.1. Review and coordinate on all requests for service contracts.

6.3.3.2.2. Review CMEs when service-type contracts are requested, modified, or terminated.

6.3.3.2.3. Non-A-76 CMEs. Maintain accurate accounting of CMEs by Functional Account Code (FAC) using the AF Form 4298, CME Documentation Log.

6.3.3.2.4. A-76 CMEs. Enter CMEs in the MDS immediately upon the final cost comparison or direct conversion decision announcement.

6.3.3.2.5. Recurring CMEs. Review/validate CME annually for accuracy, with functional participation. Transmit MDS CME transactions to command XPM as contract service requests are processed (e.g., AF Form 9) in time to be included in the August end of month MDS file.

6.3.3.2.6. Non-recurring CMEs. Review/validate CME annually for accuracy with functional participation. From total non-recurring requirements entered on the CME Documentation Log, transmit MDS CME transactions to command XPM in time to be included in the August end of month MDS file. This update is accomplished once per fiscal year.

6.3.3.2.7. Centrally Managed Contracts. These contracts are typically managed by one organization from which other organizations can utilize/buy support. Determine the local user portion of the contract, in coordination with the functional OPR, and enter associated MDS CME transactions for that organization (e.g., an environmental support contract administered by AF Center for Environmental Excellence (AFCEE) that MAJCOMs might purchase environmental civil engineer support.)

6.3.3.3. **Contracting Office.**

6.3.3.3.1. Provide supporting data (e.g., contract requirements, total contract cost, contract labor cost, contractor full-time staffing, or man-hour estimates) as available to the manpower office, as required for applicable service-type contracts.

6.3.3.4. **Functional OPR.**

6.3.3.4.1. Routes requests for service contracts, including modifications and terminations, to the Manpower office for review prior to submission of the requirement to contracting agencies.

6.3.3.4.2. Provides technical information (e.g., AFSC, FAC, skill-level, contract cost, start/stop dates) to the Manpower office for use in documentation of CME requirements.

6.3.3.4.3. Assist Manpower to verify CME data to be entered in the MDS in time to be included in the August end of month MDS file.

6.3.3.5. **Financial Management Office.** The Financial Management office provides actual service contract expense data to the Manpower office, quarterly, for obligations that may result in contractor support as required.

6.3.3.6. **Civilian Personnel Office.** The Civilian Personnel office provides personnel information supporting the CME validation to the functional representative and Manpower office as required.

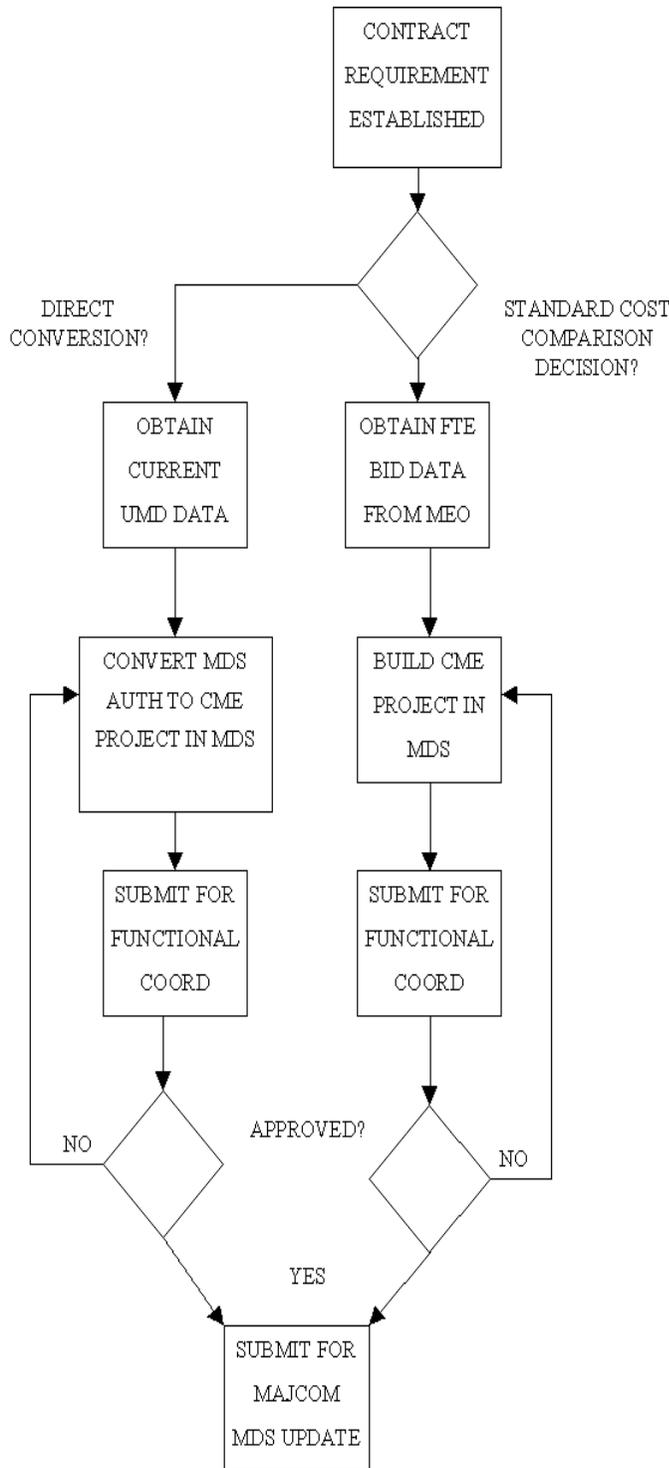
6.4. Methodology for CME Computation Resulting From Competitive Sourcing (i.e., A-76 Studies).

6.4.1. When an activity converts to a contract operation as a result of a cost comparison study, the CMEs entered in the MDS are the number of manpower positions bid in the Air Force Most Efficient Organization until the current contract is subsequently terminated or modified. If terminated, delete CME requirements from MDS effective with the termination date. If modified, and requirements mandate changes to CMEs, determine new requirement and update MDS.

6.4.2. When an activity converts to contract using direct conversion procedures, the CMEs entered in the MDS are the number of manpower positions authorized in the activity prior to conversion. In the event of contract termination, delete CME requirements effective as of the termination date. If contract modification mandates changes to CMEs, determine new requirement and update MDS.

Figure 6.1. Flowchart for Competitive Sourcing (A-76) CME Process.

FLOWCHART FOR COMPETITIVE SOURCING (A-76) CME PROCESS



6.5. Methodology for CME Computation Outside the Competitive Sourcing Process.

6.5.1. CMEs are also computed for applicable service-type contract workload (recurring and non-recurring) of \$25,000 or more annually. Recurring workload normally continues throughout the year from year to year (e.g., custodial services, food services). Non-recurring workload is limited to a one-time requirement, generally lasting one year or less, and is not continuous from year to year (e.g., disaster clean-up, air show/open house support). The total CME work year equivalent for each function will be updated in MDS at the end of each fiscal year. The intent is to obtain the most accurate estimate of CMEs for the work performed. Methods 1, 2, and 3, outlined in the following paragraphs, reflect a hierarchy of most to least accurate and will be used to calculate CMEs.

6.5.1.1. Method 1. Use contractor equivalent full-time staffing levels, as available through the contracting office and verified by the functional OPR. Work with the contracting officer and functional OPR to obtain the appropriate manpower detail and enter verified data directly into MDS.

6.5.1.2. Method 2. If a functional estimate is not available, estimate CME requirements by applying existing manpower standards or other techniques in AFMAN 38-208, Management Engineering Program (MEP) Quantification Tools, such as operational audit.

6.5.1.3. Method 3. If Method 1 and Method 2 are not feasible, use the contract value budgeted/obligated or awarded for the effort involved as a basis to estimate CME requirements. Financial management personnel at the base level can assist action officers in extracting actual obligation/expenditure data from financial systems, as well as budgeted funding set aside for future obligation. Once collected, this data may be categorized by element of expense investment code (EEIC) for CME estimation. Financial management personnel can also assist in the management of data contained in DoD legacy systems (i.e., Integrated Accounts Payable System (IAPS), Mechanization of Contract Administration Services (MOCAS), Computerized Accounts Payable System (CAPS)), which do not contain actual and recurring obligation amounts, but specific contractual data.

Figure 6.2. Flowchart for Non-A-76 CME Process (Recurring).

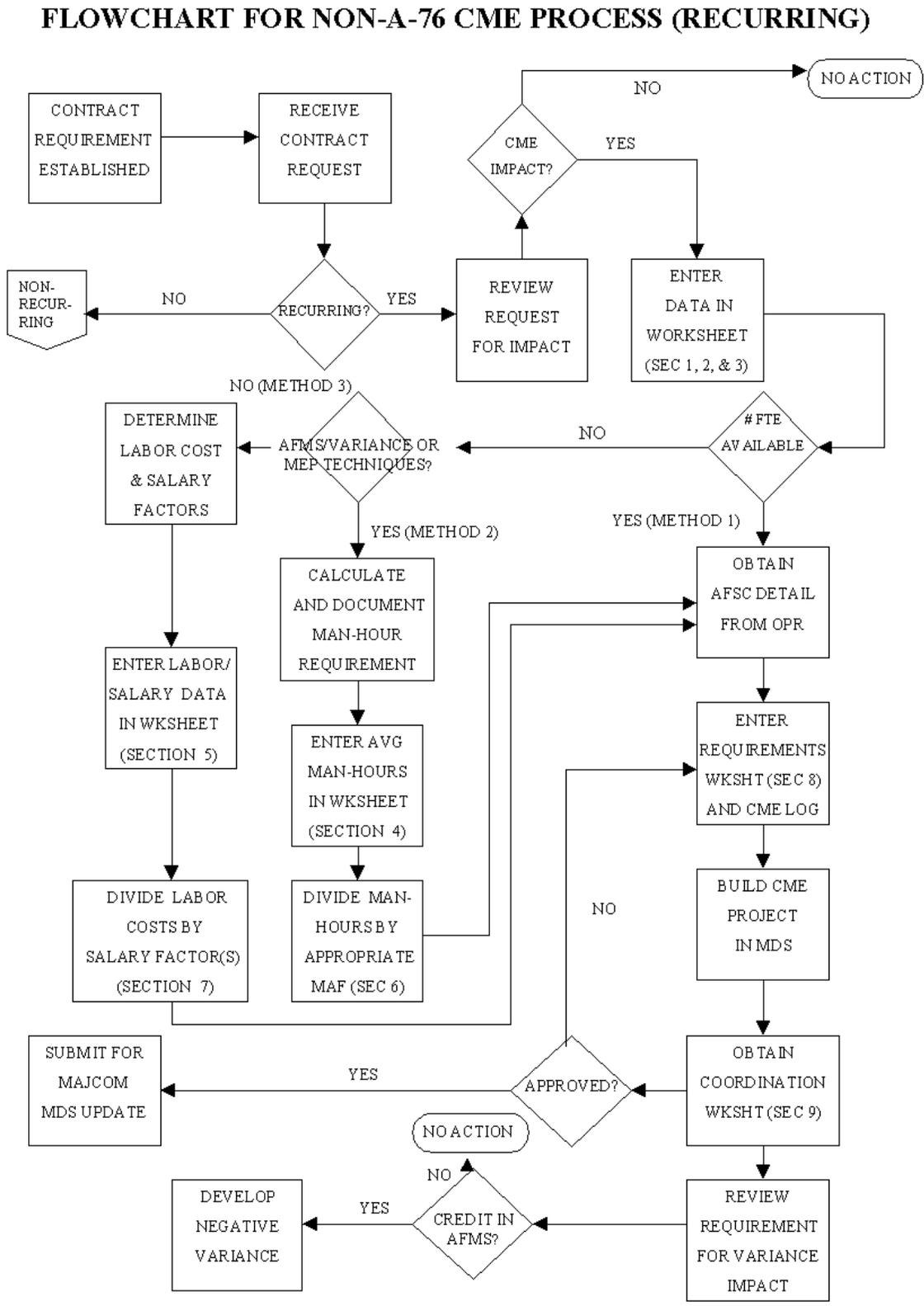
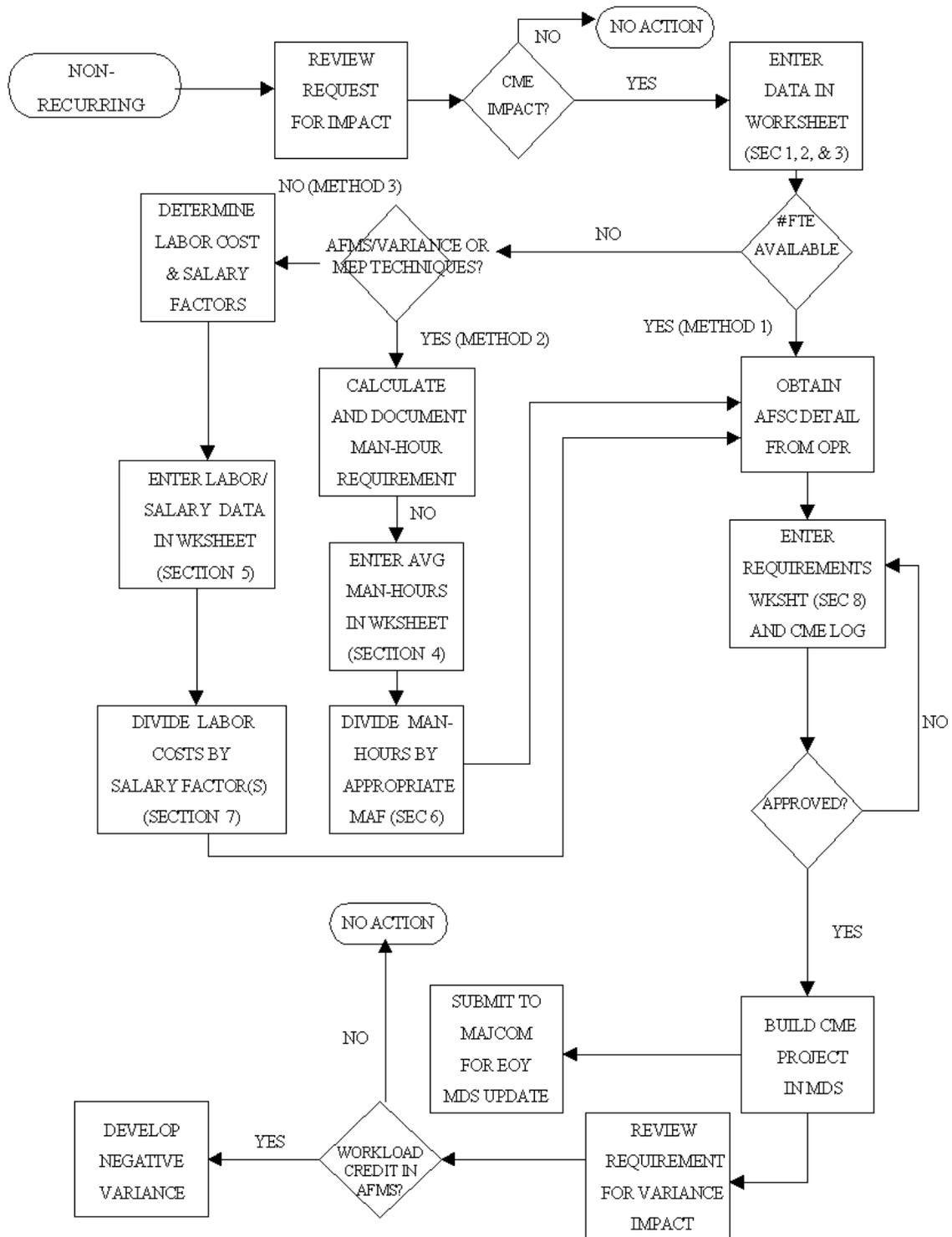


Figure 6.3. Flowchart for a Non-A-76 CME Process (Non-Recurring).

FLOWCHART FOR NON-A-76 CME PROCESS (NON-RECURRING)



6.5.2. The AF Form 4299, CME Computation Worksheet, provides a step-by-step process for the local Manpower office and MAJCOM/XPM (for workload performed at headquarters) to determine the non-A-76 CMEs associated with a service-type contracts. An electronic version of this worksheet can be found on the AFMIA web-site at <http://www.afmia.randolph.af.mil>. Information obtained through the completion of the CME Computation Worksheet should be transferred onto the CME Documentation Log maintained by the Wing Manpower office or MAJCOM/XPM (for headquarters workload). The following explains each section of the worksheet.

6.5.2.1. **Section 1 - Source of Contract Request.** Identify the appropriate source(s) used to request the contract service(s). Enter appropriate code from Sections 1.a through 1.f.

6.5.2.2. **Section 2 - Contract Request Detail.** Obtain contract information from contracting office and verify dates with functional representative. Enter appropriate codes in Section 2.a through 2.f, as applicable.

6.5.2.3. **Section 3 - Unit Manpower Document Data.** Enter the requested data in Sections 3.a through 3.g. The unit responsible for contract workload is the organization that would be required to accomplish the contracted workload if it were being performed in-house. (Example: For a “Telephone Maintenance” contract in support of the Hospital, the base Communications Squadron would normally be responsible for accomplishing this type of workload, if it were to be done in-house. Therefore, they would be the “unit responsible for contract workload,” not the Hospital).

6.5.2.4. **Section 4 - Workload Calculations.** Use this section if contractor full-time staffing estimates cannot be determined using Method 1. If the applicable manpower standard does not provide sufficient detailed information to allow the computation of average monthly man-hours, explain this in attached documentation, and use the “cost estimating procedures” in Section 5. There may be unusual circumstances where work covered by a manpower standard or variance, and resulting from an extreme or unusual surge in workload, is accomplished by a one-time contract. When this occurs, adjustments to in-house manpower requirements may not be appropriate. However, for recurring and non-recurring workload that produces a CME in a function for two or more consecutive years, the associated workload man-hours should be documented in Section 4.a.

6.5.2.5. **Section 5 - Labor Cost Calculations.** If CMEs cannot be quantified using contractor full-time staffing estimates (Method 1) or calculations based on workload (Method 2), use this section to estimate CMEs based on contract dollars (Method 3). For labor cost approximation, the manpower technician should work with the contracting officer, and the functional OPR to obtain labor cost estimates, and average salary rates using the most recent Department of Labor (DoL) Wage Determination with consideration for collective bargaining agreements and/or host country equivalents for foreign locations. Once the average contractor salary has been determined, it should be adjusted by the current Office of Management and Budget (OMB) Fringe Benefit Factors available on the AFMIA web-site at <http://www.afmia.randolph.af.mil> or host country equivalent for foreign locations. Once the total CMEs are determined for a function based on costs, work closely with the functional OPRs to determine the appropriate functional data used for each CME to be loaded in MDS.

6.5.2.6. **Section 6 - CME Computation Based on Workload.** This section computes CMEs based on information entered in Section 4 using Method 2. Otherwise leave blank.

6.5.2.7. **Section 7 - CME Computation Based on Contractor Labor Cost.** This section computes CMEs based on information entered in Section 5 using Method 3. Otherwise leave blank.

6.5.2.8. **Section 8 - Total CMEs Required.** This section shows CME totals derived from using CME calculation Methods 1 and 2 by combining totals shown in Sections 6 and 7 respectively. For CME calculation Method 1, enter annualized CME requirement directly based on verification of contractor's full-time staffing level and skip completion of Sections 4 through 7.

6.5.2.9. **Section 9 - Approval.** Obtain Manpower and Functional signatures to document approval of CME computation.

6.6. CME Documentation.

6.6.1. A-76 CMEs.

6.6.1.1. CMEs determined by paragraph 6.4. are entered in the Commercial Activity Management Information System (CAMIS) as Number of Government Work Years Bid.

6.6.1.2. For CMEs resulting from an A-76 cost comparison, use the UMD detail outlined in the government's most efficient organization (MEO) to establish CMEs.

6.6.1.3. For CMEs resulting from an A-76 direct conversion, use the UMD detail outlined in the MDS at the time of the direct conversion to establish CMEs.

6.6.1.4. MDS Specific Coding Instructions for A-76 CMEs:

6.6.1.4.1. Enter all attributes required for a CME record from the cost comparison or direct conversion.

6.6.1.4.2. Enter Manpower Standard Implementation (MSI) attribute of "g", and Manpower Function Code (FCT) attribute of "j".

6.6.1.4.3. Enter Department of Defense function code (DFC), year of last review (YLR), and year of next review (YNR) based on details of the specific completed cost comparison or direct conversion.

6.6.1.4.4. Enter the Air Force Remarks (RMK) attribute listed below to identify an A-76 CME. In addition, if an A-76 CME possesses an Air Force Remarks code other than C1, it must be corrected.

<u>Code</u>	<u>Definition</u>
C1	A-76 Study

6.6.2. Non-A-76 CMEs.

6.6.2.1. The CME Documentation Log is available on the AFMIA website at <http://www.afmia.randolph.af.mil>. The spreadsheet will be used to document all CME MDS transactions for service-type contracts occurring outside the A-76 process.

6.6.2.2. CMEs are estimated for recurring workload, documented on the CME Documentation Log, and are loaded into the MDS as soon as possible after contract award.

6.6.2.3. CMEs are estimated for non-recurring workload, documented on the CME Documentation Log, and are loaded in the MDS in time to be included in the August end of month MDS file. The CME entered in MDS (for the next fiscal year) should reflect the work year equivalent for the CME workload in a function during the current fiscal year. For example, if the Pavement and Grounds function has a contract requiring three CMEs and another contract requiring two CMEs, the MDS should be updated to reflect five CMEs for that function.

6.6.2.4. Where an AFMS exists, the associated manpower with validated CMEs will be subtracted from the total earned authorizations during application of the standard. For non-recurring CME workload, subtract CME workload for functions that document CMEs for two or more consecutive years.

6.6.2.5. MDS Specific Coding Instructions for Non-A-76 CMEs:

6.6.2.5.1. Enter all attributes required for a CME record.

6.6.2.5.2. Recurring contracts. Enter CME effective the date the contract starts through infinity, unless the end date is known.

6.6.2.5.3. Non-recurring contracts. Enter CMEs as an annualized amount--for the previous fiscal year--with an effective date of the 4th quarter of the current fiscal year and a THRU date as the 4th quarter of the following fiscal year.

6.6.2.5.4. Enter Manpower Standard Implementation (MSI) attribute of "g", and Manpower Function Code (FCT) attribute of "j" and the appropriate attribute for the Department of Defense function code (DFC). Also, enter year of last review (YLR), and year of next review (YNR).

6.6.2.5.5. Enter one of the Air Force Remarks (RMK) attributes listed below to identify the appropriate Non-A-76 CME definition. In addition, if a Non-A-76 CME currently has an Air Force Remarks code, it must be corrected to correspond to one of the definitions listed below.

<u>Code</u>	<u>Definition</u>
C2	Advisory and Assistance Service (A&AS)
C3	Federally Funded Research and Development Center (FFRDC)
C4	Depot Maintenance Activity Group (DMAG)
C5	Supply Maintenance Activity Group (SMAG)
C6	Contract not described in C1 through C5

6.6.2.5.6. Show CMEs in the unit responsible for contract workload if it were being performed in-house. If the unit that would be responsible for accomplishing the workload does not exist, reflect the CMEs in

the next higher unit level of the installation, where the work is performed. Add annualized CME estimated for each organization, by FAC, to determine the total CME for the organization, prior to entry into MDS.

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

Term TO BE CHANGED:

Contract Manpower Equivalent (CME)—The number of man-years required if in-house employees or a contractor work force perform a contracted workload at a specified level of performance.

Term TO BE ADDED:

Man-Year Equivalents – The number of productive man-hours required per year to equate to one Contract Manpower Equivalent (CME). Man-Year Equivalents sometime vary based on the type of contract. Man-Year Equivalents by category are as follows:

1. Advisory and Assistance Services Contracts = 1764 man-hours per year
 - a. Based on MAF of 147.
2. Federally Funded Research & Development Center (FFRDC) Contracts = 1810 man-hours per year
 - a. Based on MAF of 150.83.
3. Other Service Contract not list above = 1776 man-hours per year
 - a. Based on MAF of 148.

Term TO BE DELETED:

Finite Workload—Deleted.

Attachment 4

SERVICE-TYPE CONTRACTS INCLUDED OR EXCLUDED IN THE CONTRACT MANPOWER EQUIVALENT DEVELOPMENT PROCESS

A4.1. Include contracts that:

- A4.1.1. Operate, maintain, repair, overhaul, rehabilitate and/or modify Air Force equipment.
- A4.1.2. Maintain, repair and/or alter Air Force real property.
- A4.1.3. Provide architectural-engineering master planning.
- A4.1.4. Engineer and/or install equipment.
- A4.1.5. Operate facilities and/or systems.
- A4.1.6. Provide housekeeping or base services.
- A4.1.7. Operate and/or maintain government-owned utility systems.
- A4.1.8. Provide demilitarization and/or disposal services.
- A4.1.9. Train in-service personnel, including dependents.
- A4.1.10. Provide medical and/or legal services.
- A4.1.11. Provide photography, duplicating, or copying services.
- A4.1.12. Provide special studies and/or related services, including consultant services.

- A4.1.13. Design and/or test new weapons systems, techniques and equipment.
- A4.1.14. Provide engineering and/or technical services.
- A4.1.15. Provide services under industrial funds.
- A4.1.16. Operate and/or maintain leased or rented equipment and facilities.
- A4.1.17. Provide personal services.
- A4.1.18. Acquire services via Depot Maintenance Activity Group (DMAG) Funds.
- A4.1.19. Acquire services via Supply Maintenance Activity Group (SMAG) Funds.
- A4.1.20. Provide Advisory and Assistance Services (A&AS) including support provided by Federally Funded Research and Development Centers.

A4.2. Exclude service-type contracts that:

- A4.2.1. Acquire Air Force equipment.
- A4.2.2. Operate government-owned industrial facilities incidental to a production contract.
- A4.2.3. Engineer or install equipment incidental to a production contract.
- A4.2.4. Construct facilities or provide engineering and related services financed by military construction appropriation.
- A4.2.5. Purchase supplies (except the labor portion of Contractor Operated Civil Engineer Supply Store (COCESS) and Contractor Operated Parts Store (COPARS), utilities and commodities.
- A4.2.6. Lease or rent equipment and facilities.
- A4.2.7. Acquire military off-duty education programs.
- A4.2.8. Acquire "fare" surface or water off-base transportation.

Attachment 10**IC 02-1 TO AFI 38-201, DETERMINING MANPOWER REQUIREMENTS****20 MARCH 2002*****SUMMARY OF REVISIONS***

This change updates and clarifies paragraph **1.4.5.11.**; **1.4.4.7.** and **2.3.1.** Air Force manpower standard variance policy involving variance submission time limits; minimum threshold limits; variance level of service requirements; and the variance approval and funding process. It also defines what constitutes a valid unfunded manpower requirement and the documentation requirements (new paragraph **2.8.**). A (H) indicates a revision to the paragraph from the previous edition.

2.1.3.1. In order to streamline the AFMS development process, MAJCOMs will be given 60 days from the Process Oriented Description (POD) release date to submit all variances to AFMIA. Air Force variance workload identified after the 60 day POD release will not be considered during the current AFMS development effort and will be the responsibility of the applicable MAJCOM.

2.1.3.2. Variances are developed when *significant* differences in workload requirements are not covered by the core manpower standard. For consideration, each variance must meet a minimum threshold limit of 25 monthly man-hours.

2.1.3.3. During development of AFMSs, the AFMIA reengineering team, partnering with the responsible functional OPR, will document an average level of service for all core workload. Any MAJCOM that has established a higher level of service than required by Air Force may develop a MAJCOM variance.

2.1.3.6. All MAJCOM/XPMs and respective functional representatives will coordinate on all applicable proposed Air Force variances.

2.1.3.6.1. Air Force variances (directed by Air Force--even if applicable to a single command), submitted within the 60 day time period, will be included as part of the AFMS impact, and be vetted through the Air Force corporate structure for approval of required funding levels.

2.1.3.6.2. Approval and funding of all MAJCOM-directed variances or those variances supporting an increased level of service above the Air Force core workload will be accomplished by the owning MAJCOM.

2.1.3.6.3. Air Force variance workload identified 60 days after POD release will be the responsibility of the owning MAJCOM.

1.4.4.7. Delete sentence 2 through 5.

1.4.5.11. DELETED

(Added) **2.8. Documenting Unfunded Manpower Requirements**

2.8.1. Unfunded manpower requirements must be documented in order to quantify total Air Force manpower needs. The goal of the reengineering effort as documented in the Annual Planning and Programming Guidance is to eliminate unfunded requirements. However, an environment that is constrained both fiscally and by recruiting/retention will result in unfunded requirements that must be documented in MDS.

2.8.2. All Program Objective Memorandum/Budget Estimate Submission initiatives with manpower requirements will be submitted to the Air Force Corporate structure-- with specific MDS coding.

2.8.3. Sources for validated unfunded manpower requirements include:

2.8.3.1 Required but unfunded manpower levels based on the application of approved manpower determinants including traditional manpower standards, and LCOM studies.

2.8.3.2. Required but unfunded aircrew requirements based on approved aircrew ratios applied to authorized primary aircraft inventory force structure levels.

2.8.3.3. Manpower requirements for Program Objective Memorandum/Budget Estimate Tab P initiatives with an effective date two years or less from the date of notification that were considered but not funded by the Air Force Corporate Board. These requirements will use an MSI code "1" to highlight Air Force Corporate Board (Tab P) unfunded requirements.

2.8.4. MDS specific coding for POM initiative submission include the following attributes: EFF, TRU, PEC, CAT, PAS, FAC, OSC, AFSC, API*, GRD, MSI, FCT, CEC*, EMP*. (* where applicable) After the implementation of the new HAF-MDS, the list will include IGCA, AEF and RIC.

2.8.5. AF/XPMP will advise the MAJCOM/XPMs of the manpower CCNs considered but not funded by the Air Force Corporate Board.

2.8.6. An annual revalidation of all unfunded requirements must be accomplished and updated in MDS no later than 31 Oct of each fiscal year. Any requirement not funded after two budget cycles will be removed.

Attachment 11**IC 2003-1 TO AFI 38-201, DETERMINING MANPOWER REQUIREMENTS****9 DECEMBER 2003****SUMMARY OF REVISIONS**

This change incorporates interim change (IC) 2003-1. It updates the Man-Hour Availability Factor (MAF) in **Table 2.2.**, “Application Instructions for Air Force Manpower Standards Resulting in Man-Hours,” and **Table A2.1.**, “Standard Air Force Workweeks and Man-Hour Availability Factors.” This change also updates the HQ USAF/DPMR office symbol and AFMIA nomenclature for paragraphs **2.2.** and **2.4.** A bar (|) indicates revision from the previous edition.

Table 2.2. Replace with the attached updated table.

Table A2.1. Replace with the attached updated table.

Paragraph 2.2.2. Replace with the following: “Compute Air Force Reserve civilian requirements (both technician and non-technician) and use the civilian CONUS MAF.”

Paragraph 2.2.3. Replace with the following: “Develop deployment packages for the Manpower Force Packaging System and wartime military manpower requirements for Air National Guard and Air Force Reserve Command, as directed in the War and Mobilization Plan (WMP). Use the wartime emergency MAF.”

Paragraph 2.2.6.1. Replace with the following: “AFMIA develops and maintains the Peacetime MAFs (normal 40-hour and extended 48-hour workweeks) and Wartime MAFs (emergency 60-hour and surge 72-hour workweeks).”

Paragraph 2.2.6.2. Replace with the following: “HQ USAF/DPM approves peacetime and wartime MAFs.”

Paragraph 2.2.6.3. Replace with the following: “AFMIA reviews peacetime MAFs during even-numbered years and wartime MAFs every three years and updates as required, using the previous year’s data.”

Paragraph 2.2.6.4. Replace with the following: “AFMIA develops and maintains special MAFs (non-standard workweeks) for functions that cross command lines: e.g., fire protection personnel work a 72-hour workweek. MAJCOMs develop and maintain foreign national civilian and command unique MAFs. AFMIA reviews and comments on all special MAFs. HQ USAF/DPM approves all special MAFs. **Attachment 2 (Table 2.2.)** contains a list of each approved special MAF and the year it was developed or last updated.”

Paragraph 2.2.6.5. Replace with the following: “AFMIA and MAJCOMs review and update special MAFs as needed, using the previous year’s data.”

Paragraph 2.2.6.6. Replace with the following: “Commands may request consideration of a new workweek. Send requests to AFMIA for review and comment. The request must contain detailed justification for the new workweek and describe the circumstances and nonavailability activity policies for using it. AFMIA will forward recommendations to HQ USAF/DPM for action.”

Paragraph 2.2.6.7. Replace with the following: “HQ USAF/DP provides actual availability data based on continuing analysis of PERSTEMPO issues such as TDY for training. HQ USAF/DPXJ, Readiness and Joint Matters Division, is the Air Staff OPR for PERSTEMPO.”

Paragraph 2.4.3. Replace with the following: “Fund increased manpower costs resulting from implementation of new AFMSs from existing command resources. Unless otherwise directed by HQ USAF, retain and reinvest manpower authorizations saved from the implementation of AFMSs, PECEI programs, or other product/service task improvements. AFMSs and variances must not contain any unfunded mandates. Steps may include acquiring additional resources via internal MAJCOM realignment or PPBS initiatives, organization reengineering, other methods enhancement initiatives or prioritizing products and services consistent with available resources. Forward all reprogramming of command manpower authorizations and requests for additional manpower resources to HQ USAF/DPM. HQ USAF/DPM will work the requests through the mission and mission support panels (resource allocation teams).”

Paragraph 2.4.4. Replace with the following: “Reapply AFMSs as required by changes in mission or significant base population changes (greater than 100 authorizations). Commands may reapply the standards more frequently as established by the MAJCOM/XPM.”

Table 2.2. Application Instructions for Air Force Manpower Standards Resulting in Man-Hours.

STEP	ACTION	EXAMPLE
1	Compute basic AFMS man-hours. Include all variances. Sum the man-hours for the AFMS.	The sum of AFMS 42B1, Vehicle Maintenance, is 7331.49 man-hours. This example assumes an over-seas location.
2	Subtract approved contract manpower equivalent (CME) man-hours from the step 1 sum to determine total in-service man-hours. At a minimum, CMEs should be validated annually and should be current before applying Air Force Manpower Standards.	The total in-service man-hours for Functional Account Code (FAC) 42B1 is 7331.49; this flight has no CMEs.
3	Determine the required military positions (includes military essential positions per AFI 38-204). If all positions must be military, then divide the total man-hours from step 2 by the military MAF times the overload factor. Round up to the next whole number. If all positions are not required to be military, then go to step 4.	<p>ALL MILITARY:</p> $\frac{7331.49}{(149.6 \times 1.077)} = 45.50 = 46 \text{ military}$ <p>Only 26 positions must be military in FAC 42B1; go to step 4.</p>
4	Compute military man-hours. Multiply the military positions determined in step 3 times the appropriate military MAF, then multiply the result by the appropriate overload factor.	26 military X 149.6 (MAF) X 1.077 (40-hour workweek overload factor) = 4189.10 monthly man-hours
5	Compute total civilian man-hours. Subtract man-hours obtained in step 4 from in-service man-hours computed in step 2.	$\begin{array}{r} 7331.49 \text{ Total man-hours} \\ - 4189.10 \text{ Military man-hours} \\ \hline 3142.39 \text{ Total civilian man-hours} \end{array}$
6	Determine the required Foreign National (FN) civilian positions. Convert to FN man-hours by multiplying by the appropriate MAF. Do not use any overload factor for FN civilians.	There must be 8 FN civilian positions in FAC 42B1. The United Kingdom 39-hour workweek MAF is used for this example. 8 X 143.31 = 1146.48 FN monthly man-hours

S T E P	ACTION	EXAMPLE
7	Compute United States Direct Hire (US-DH) civilian man-hours. Subtract man-hours obtained in step 6 from man-hours obtained in step 5.	$ \begin{array}{r} 3142.39 \text{ Total civilian man-hours} \\ - 1146.48 \text{ FN man-hours} \\ \hline 1995.91 \text{ Total USDH civilian man-hours} \end{array} $
8	Determine USDH civilian positions. Go to step 9 if computed man-hours equal or exceed 926.00 (or more than 6 civilian positions) for CONUS locations or 968.65 for overseas locations. Divide by the product of the appropriate USDH civilian MAF and overload factor if computed man-hours are less than the above. Round up to the next whole number.	Computed man-hours exceed 968.65; go to step 9.
9	When USDH civilian man-hours equal or exceed 926.00 for CONUS locations or 968.65 for overseas locations, divide by the appropriate civilian MAF. If the fractional manpower requirement is less than .5, round down to the next whole number. If the fractional manpower is .5 or greater, round up to the next whole number.	$ \begin{array}{r} 1995.91 \text{ USDH civilian man-hours} \\ \hline 149.9 \\ = 13.3 = 13 \text{ civilians} \end{array} $
10	Determine total positions. Sum positions obtained in steps 2, 3, 6, and 8 or 9 (as appropriate).	$ \begin{array}{r} 26 \text{ Military requirements} \\ 13 \text{ USDH civilian requirements} \\ 8 \text{ FN civilian requirements} \\ \hline 0 \text{ CMEs} \\ 47 \text{ Total requirements} \end{array} $

Table A2.1. Standard Air Force Workweeks and Man-Hour Availability Factors.

Standard Workweek ⁸	Normal 40-Hour CONUS/Overseas 5 Days/Wk 8 Hrs/Day		Extended 48 Overseas 6 Days/Wk 8 Hrs/Day	Wartime Emergency		Wartime Surge	
Computation of Assigned Hours	5 Days 8 Hours/Day 40 Hr/Week		6 Days 8 Hrs/Day 48 Hr Wk	6 Days 10 Hrs/Day 60 Hr Wk		6 Days 12 Hrs/Day 72 Hr Wk	
Calendar Days/Month: 365.25 days/year 12 Months/year	30.4375		30.4375	30.4375		30.4375	
Less:							
Holidays/Month: <u>10 holidays</u> 12 months	-0.8333						
Weekend Days/Month ¹ (2 days/week)(4.3482 weeks/ month)	-8.6964		-0.8333				
(1 day/wk)(4.3482 weeks/month)			-4.3482	-4.3482			-4.3482
Assigned Days/Month Hours/Day	20.9078 <u>X 8</u>		25.2560 <u>X 8</u>	26.0893 <u>X 10</u>		26.0893 <u>X 12</u>	
Monthly Assigned Hours	167.26		202.05	260.89		313.07	
	MIL ²	CIV ³	MIL ⁴	MIL	CIV	MIL	CIV
		CONUS	OVERSEAS				
Nonavailable Categories							
Leave	9.12	14.67	10.49	10.83	5.80	0.00	
PCS-related	0.50			2.14	0.72	0.00	
Medical (Sick Leave)	1.64	6.97	4.45	1.00	2.40	2.31	
Organizational Duties	3.57			3.70	5.82	2.39	
Education & Training	2.82	1.47	1.58	2.12	0.19	0.00	
Social Actions					0.03	0.00	
Special Absences ⁵		0.83	0.89		0.00	0.00	
Total Nonavailable Hours	17.65	23.94	17.41	19.79	14.96	4.70	
Monthly Hours Available to	149.6	143.3	149.9	182.3	246.00	308.00	
Primary Duty (MAF) ^{6,7}							

NOTES:

1. Saturday, Sunday, or compensatory weekday for weekend workday.
2. Applies to all CONUS and overseas locations working a normal 40-hour workweek. This data is based on the Aug 02 Peacetime Military MAF Update Study.
3. Alaska and Hawaii are included in the CONUS civilian computation. The civilian MAF also includes United States Code Title 32 civilian assigned to Reserve units. This data is based on the Aug 2002 Peacetime Civilian MAF Update Study.
4. There are currently no locations in the world where US direct-hire civilians are working an extended workweek.
5. Special absences for civilians include registration or voting, blood donations, military funerals, court leave, etc.
6. Monthly Man-hour Availability Factor (MAF) to be used for manpower computations.
7. The MAFs for Wartime Emergency and Wartime Surge have been truncated to the nearest whole number. This data is based on Aug 1999 Military Wartime and Contingency MAF Study. There is no current Civilian Wartime/Contingency MAF.
8. Overload factors for various workweeks are provided at para [2.3](#).

Attachment 12**IC 2003-2 TO AFI 38-201, DETERMINING MANPOWER REQUIREMENTS**

30 DECEMBER 2003

SUMMARY OF REVISIONS

This change incorporates interim change (IC) 2003-2. It updates the Fire Fighter Man-Hour Availability Factor (MAF) in **Table A2.2**, “Standard Air Force Workweeks and Man-Hour Availability Factors.” A bar (|) indicates revision from the previous edition.

Table A2.2. Replace with the attached updated table.

Table A2.2. Special Air Force Workweeks and Man-hour Availability Factors.

	Workweek (in hours)	Monthly Man-hour Availability Factor (MAF)	Year Approved
Fire Fighters	72	277.0	2003
USAF Academy Faculty	45	178.4	1992
Foreign National Civilians (by country)			
Germany			
Rheinland-Pfalz	38.5	126.31	1991
	40-43	138.07	1991
	43.5-47	153.16	1991
	48-50	166.18	1991
	51-55	184.75	1991
	44-50 (6-day workweek)	156.68	1991
Hessen	38.5	127.0	1991
	40-45	147.62	1991
	47-54	171.32	1991
	48.51 (6-day workweek)	166.71	1991
Berlin	38.5-40	132.5	1991
	41.5-43	145.36	1991
	47	164.79	1991
Fire Protection	58.88	208.47	1991
Greece	39	139.62	1985
	40	142.86	1985
	42	152.95	1985

	Workweek (in hours)	Monthly Man-hour Availability Factor (MAF)	Year Approved
Italy	40	136.5	1987
	67.4	246.1	1987
	72	263.4	1987
Japan	40	149.0	1978
Korea	48	188.4/145.2	1978
Netherlands	38	125.5	1990
Philippines	40	149.0	1978
Portugal (Azores)	40	143.3	1979
	44	153.8	1979
Spain	40	139.6	1990
	72	275.15	1990
Turkey	45	148.63	1987
	48	158.9	1987
United Kingdom	39 (non-industrial)	143.31	1986
	42 (industrial)	135.53	1994