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FINAL REPORT

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DETERMINE OPTIMUM
CONTRACTING CYCLE TIME FOR AFLC

SUBMITTED TO:
AFLC/PMP AND PMX

ACCOMPLISHED UNDER:
CONTRACT F33615-86-C-5036

PREPARED BY:
MODERN TECHNOLOGIES CORP
4134 LINDEN AVENUE
DAYTON, OHIO 45432

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19. ABSTRACT (Continue on reverse if necessary and identify by block number) The technical report submitted by MTC states the impact of legislative requirements on contracting administrative lead time. The research approach to determine optimum cycle standards is described along with a detailed description of the cycles evaluated. A revised version of the HQ AFLC flowchart is also included in the report. Organization elements and external influences are discussed in-depth. This section is followed by the description of various problems impacting cycle performance. MTC highlights recommendations to improve operational efficiencies and the revised standards including the criteria used to establish these standards. The report concludes by recommending use of cycle standards and suggestions for future studies. (K8) ←			
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1. Exception Reason Codes 70-89
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1 INTRODUCTION

This technical report is submitted by Modern Technologies Corporation (MTC) to provide the results of research accomplished to determine optimum contracting cycle times for the Air Force Logistics Command (AFLC). Changes to the existing cycle standards are required as a result of the significant changes which have occurred in the Public Laws, Regulations and policies which govern the contracting process within AFLC.

Our approach to this task is built on our experience in the evaluation of spare parts acquisition. Our research team searched the current literature and made on-site visits to the ALC's to ensure that the data analyzed was accurate and current. During the visits, we tracked the elements involved with accomplishing contracting actions for each of the cycles selected for study. Interviews were held with personnel in the contracting function and the supporting elements. We analyzed each of the identified Public Laws to determine the type and expected magnitude of the impacts on the AFLC contracting process. This blend of observational and analytic data provides a firm basis for defining realistic standards for the various contracting cycles. The sections of this report which follow provide a description of our understanding of the problem, the technical approach used to solve this problem for AFLC and our detailed recommendations.

2 STATEMENT OF THE PROBLEM

There has been substantial turmoil in the rules under which the Air Force (AF) contracting function operates. The Congress has been aggressively implementing statutes which have had significant impact on the contracting process within the Air Force Logistics Command (AFLC). Figure 2-1 lists a number of these statutes. These changes, individually and collectively, have adversely impacted the flow time for accomplishing contracting actions within AFLC. In addition to the legislative impact, the Congressional and public attention to the spare parts acquisition process has resulted in modification to existing regulations, policies and to the behavior of the buyers and contracting officers charged with accomplishing the buy program. One cumulative result of all these changes has been to call into question the existing cycle standards for the various contracting actions. The results of this research will provide a basis to establish a valid set of standards for a number of specific cycles.

Public Law 98-369, Competition in Contracting Act (CICA), signed July 18, 1984, required that executive agencies obtain full and open competition for acquisition of property or services. It also authorized special simplified procedures for small purchases of property and materials. Within this statute, small purchases are defined to be those with a price of less than \$25,000. The stated purpose of those procedures is to promote efficiency and economy in contracting and to avoid unnecessary burden for agencies and contractors. The statute does insert the caveat that the agencies shall promote competition to the maximum extent practicable while acquiring small purchase items.

<u>Title</u>	<u>PL</u>	<u>Date</u>
Federal Courts Improvement Act	97-164	02 Apr 82
Prompt Payment Act	97-117	21 May 82
Debt Collection Act	97-365	01 Oct 82
DOD Appropriation Act of 1982	97-377	21 Dec 82
Amendment to Small Business Act	98-72	11 Aug 83
DOD Authorization Act of 1983	98-94	24 Sep 83
OFPP Act Amendment	98-191	17 Nov 83
DOD Appropriation Act of 1983	98-212	08 Dec 83
Competition in Contracting Act	98-369	18 Jul 84
Procurement Reform Act of 1984	98-525	19 Oct 84
Small Business and Federal Procurement Competition Enhancement Act of 1984	98-577	30 Oct 84

Figure 2-1. Legislation Impacting AFLC Contracting

CICA also established a requirement that a Justification and Approval (J&A) document be accomplished for sole source acquisitions. The document must justify the sole source decision and explain what will be done to improve the competition environment prior to the next purchase. The approval level for these J&A's varies with the dollar value of the acquisition.

CICA reduced the threshold for submission of certified cost and pricing data to \$100,000 and required that the proposed procurement be synopsisized in the Commerce Business Daily 15 days before release of the solicitation. It also established a minimum of 30 days between solicitation release and proposal due date. CICA also mandated the establishment of an advocate for competition within each Federal agency with a charter to challenge barriers to competition and promote full and open competition.

A second major impact came as a result of the Defense Procurement Reform Act and the DOD Authorization Act of 1985, PL98-525, 19 Oct 1984. This act requires that the buyer obtain

information within the quotation on economic order quantities and price breaks. This particular requirement was required for implementation on 17 April 1985. Quotations received after that date which offer a price break for differing quantities are referred to the item manager (IM) or evaluation. Where there is a potential price break for increased quantities, the IM is required to research the acceptability of the increased quantity within the supply system and availability of the funds to acquire this increased quantity. While price breaks may offer great economic benefits if the economic quantities are purchased, this requirement increases the processing time to complete the purchase.

This act also restricted the ability of the Air Force or the prime contractor to limit the sources from which parts may be acquired. In many cases formal qualification is required to become an acceptable source for specific parts. Where there is a sole source or limited sources and another source wishes to be considered, it has been Air Force policy that the cost of qualification will be borne by that new source. This effectively limited the entry of new suppliers into the system since the cost of the qualification placed them in a situation where it was difficult to be price competitive with current suppliers. The act greatly restricts the conditions under which the requirement for source qualification prior to proposing can be applied. Removing these conditions will introduce a number of new sources which will require evaluation prior to award or the use of extensive inspection of the initial units produced by that supplier. In addition, the Material Management (MM) organization and the Competition Advocate (CR) organization will be required to make an affirmative decision as to the acceptability of these sources during the acquisition process, thus, increasing the flow time required to execute the contract.

The DOD Authorization Act of 1983, PL 98-94, 24 September 1983, established a requirement prohibiting the award of a contract for a spare part or replacement item where the price had increased in excess of a threshold percentage since a defined time in the

past. The percentage and the time period were to be established by the Secretary of Defense. As currently established, any item whose price has increased by more than 25% in the past year may not be purchased unless the contracting officer certifies, in writing, to the Head of the Procuring Activity that a) the price increase is fair and reasonable, or b) the national security interest requires that the part be purchased at the quoted price. This certification requires research by the buyer or contracting officer which impacts the flow time to complete the buy.

Each of the Public Laws in Figure 2-1 has had specific impacts on particular phases of the contracting process. The impacts are evident in the changes in the content of the contracting process and in the sequence of actions accomplished by the individual buyers. The charges call into substantial question the standards for processing of contractual actions since these standards predate the Public Laws. The purpose of this research is to identify the current processing activities and recommend realistic, attainable but challenging standards for the cycles to be studied.

3 RESEARCH APPROACH

Generating new cycle standards depends upon first establishing a clear definition of the contracting flows which existed prior to the major changes of the last few years. This set of work flows is the basis on which the current cycle standards were developed. Our research started with analysis of preliminary flow chart description of the contracting flow for the cycles to be studied. These cycles are shown in Figure 3-1. This initial chart was continuously revised based on research at Hq AFLC and the individual ALC's. The flow chart in section 4 of this report is the updated chart showing the current processing sequence within the ALC's.

3.1 Literature Search

The recent literature was searched to identify and obtain relevant studies concerning the impact of the new Public Laws and changes in Procurement Administration Lead Time. The primary search was directed to the Defense Technical Information Center (DTIC) and the Defense Logistics Studies Information Exchange (DLSIE). These searches were accomplished through the Air Force Business Research Management Center (AFBRMC) to minimize the time required and the direct cost to the contract. In addition, the open literature was searched at the Air Force Institute of Technology (AFIT) and the Wright State University (WSU) libraries. The WSU library served as source for background data and text of the applicable statutes since it serves as a repository library for Federal documents.

Cycle No.		Days*
1	Sealed Bid	90
2	Two-Step	200
3	Source Selection	200
4	Small Purchases- Noncomplex	50
5	Negotiated Noncomplex Actions \$25,001-\$100,000	70
6	Negotiated Actions Over \$100,001-\$9,999,999	165
7	Complex Small Purchase 0-\$25,000	80
8	Negotiated Actions over \$10 million	180
9	Complex Negotiated Actions \$25,001-\$100,000	95
J	Class IVA Safety Modification Coverage	30
W	Letter Contract Definitization	180
X	Change Order Definitization	180
Y	Unpriced BOA Order Definitization	150

* Cycle Days as of 25 October 1986 AFLCR 70-11
Figure 3-1 Cycles Studied

3.2 Regulation Review

Air Force and AFLC regulation and directives were reviewed in the AFLC library. MTC maintains an updated FAR at our offices which was used for the FAR research. The text of the statutes were obtained from the Directorate of Contracting and Manufacturing at Hq AFLC (AFLC/PMP). In addition, contact was made with the AFLC Judge Advocate General personnel to ensure that we had identified all the enacted statutes which impact the contracting process. Each of the statutes was analyzed to identify the following elements:

Effective Date
Activities Impacted
New Requirement(s)
Expected Flow Impact

Based upon the current FAR and Public Law requirements, the flow chart shown in section 4-2 was revised and updated continuously.

3.3 ALC Visits

Each of the five ALC's were visited. Required prenotice (10 days) of the specific trips was provided to AFBRMC/RDCB and AFLC/PMXA. In addition, contact was made with the PMX organization at each ALC to provide a detailed description of the expected sequence of actions to be accomplished and data requested at each ALC. In addition, follow-up visits were accomplished to SAALC and WRALC to gather additional specific information on current procedures and flow times as recorded in contract files.

As another part of the preparation for the on-site effort, data for each ALC was requested from PMX which included at least:

1. Number of actions processed in each cycle last FY and this FY to date.
2. History on actual times expended for each cycle.
3. Distribution of purchases by dollar value and competition code within appropriate cycles.

This data provided a basis for MTC to establish meaningful samples for each ALC visit. During the on-site effort, the MTC researchers observed the actual processing sequence for the cycles under study. The actual time required for observation was minimized by identifying generic processing elements which can occur in various cycles. These were studied independently and the resultant data applied to a number of cycles.

The research team also interviewed personnel within the Contracting function to obtain their perception of the impact of

specific legislative requirements. This combination of interview and observations provided a realistic picture of the current processing environment. Discussions were held with supervisory personnel to determine if current backlogs are representative.

3.4 Cycle Time Definition

The fundamental goal in establishing various cycles is to group similar contracting actions for management and control. The similarity of interest in establishing the cycle definitions is the expected or natural flow times and processing activities within the contracting process. One potential result of the recent legislative activity is a change in the boundary conditions for the various cycles. MTC structured the changes in public law in a format which shows impact on specific cycles. We also addressed the question of the logic which underlies the existing set of definitions, especially for those cycles with similar flow times. Based on the analysis of these two sets of data, we developed recommended changes to the cycles shown in Section 8.

To establish the required cycle standards, we determined the mandatory span times for each cycle. These mandatory span times include such elements as the requirement to allow 30 days for submission of proposals after the solicitation date. We further defined for each cycle the mandatory processing requirements. This would include mandatory elements such as Judge Advocate General review and variable elements such as Contracts Committee review. One significant source of data concerning these types of elements is the list of complexity elements of the E841 System. In many cases, specific processing steps are required for all contract actions within a cycle. However, there are situations in which the requirements apply to a subset of the actions in a cycle. The frequency of occurrence of these situations can be estimated based on the E841 data. Where the latter is the case, the impact on cycle processing times was developed on a probabilistic basis.

The output of this portion of the analysis is a set of mean span times which can be used as cycle flow "building blocks". During the visits to the ALC's, specific data on span times experienced was gathered. The actual time shown in the AFLC reports for the past three Fiscal Years may not be representative of a realistic cycle time due to the high levels of AFLC Contracting turmoil coupled with substantial increases in workload.

While the mean span times provide some degree of quantification, we also attempted to obtain information on the variability in actual span times. The observed variability was a function of the specific conditions of each acquisition. While the variability may be of interest when evaluating performance on a specific acquisition, the mean span times were judged adequate for the development of Command standards.

The individual elements which comprise each cycle were identified. Expected span times for each of these elements were developed based on:

- a) Actual experience
- b) Flow analysis

The flow analysis identified the discrete steps in each processing element and determined the time which should be required to accomplish each step. Allowance was developed for queue, wait and move time for the documentation involved. Each operation and move were evaluated for necessity and to determine potential improvements in flow time. The optimum time for each cycle was developed by summing the included elements (weighted for frequency of occurrence when necessary) in the cycle. These cycle standards were provided to PMX and PMP personnel in draft form as they became available for review and comment.

We also identified current or planned practices within the contract processing cycle which adversely or beneficially affect the

ability of the AFLC Contracting work force to meet the standard.
When these changes were implemented or planned for implementation, we based the recommended standard on that basis.

4 CURRENT CYCLES

4.1 Cycle Descriptions

The following paragraphs provide summary descriptions of each of the cycles studied under this contract.

4.1.1 Cycle 1 - Sealed Bid

Sealed Bid Cycle is used for all contracts which are 100% set-aside for small business or labor surplus area. Sealed bid involves using an Invitation for Bid (IFB) with a formal bid opening to determine low bidder. Price and responsiveness factors are the only evaluation criteria. Sealed Bid restricts discussion between the buyer and contractor prior to selection. The standard presently allowed for this cycle is 90 days.

4.1.2 Cycle 2 - Two-Step

Cycle 2, Two-Step involves those contracts awarded based on submission and evaluation of technical proposals to identify acceptable technical offerors followed by sealed bid price proposals. The decision as to whether Two-Step is used or not is normally made before the PR is received by the buyer. Thus, the cycle standard assumes that the PR is not forwarded to PM prior to the completion of the Business Strategy Panel (ESP), and Acquisition Plan (AP). The first step involves the receipt and evaluation of the technical proposal. The contractors that are chosen on the basis of technical merit are then solicited for their price proposal. The contractor is chosen on the basis of low responsive offer. The standard presently allowed for this cycle is 200 days.

4.1.3 Cycle 3 - Source Selection

This cycle involves evaluation of a technical and cost proposal. The cycle initiates under the assumption that the PR is accompanied

by a Statement of Work (SOW), a Business Strategy Panel (BSP), and Acquisition Plan (AP) have been conducted and processed for approval. The Source Selection Evaluation Group has the responsibility for the process which includes Preproposal conference, evaluation, rating, and midterm and final briefings. Source Selection procedures are normally used on acquisitions which are over \$10 million and require an integrated assessment of technical and cost issues. The standard is 200 days.

4.1.4 Cycle 4 Noncomplex Small Purchases

All competitive actions under \$25,000 are in this cycle. The Price Evaluation Codes (PEC) for cycle 4 are: adequate price competition (A), government established catalog price (H), formula pricing agreement (J), and actions less than \$1000 (N).

4.1.5 Cycle 5 - Noncomplex Actions under \$100,000

Cycle 5 actions are competitive, noncomplex, between \$25,000-\$100,000. The PEC's used are A, H, or J. Time standard is 70 days.

4.1.6 Cycle 6 - Negotiated Actions Between \$100,001 - \$9,999,999

These actions are sole source or competitive contracts greater than \$100K and less than \$10 million. The standard is established with the assumption that the PR package includes the Statement of Work (SOW), and part 1 of the J & A when required. The time standard is 165 days.

4.1.7 Cycle 7 - Complex Small Purchase

Sole source buys under \$25,000 are in cycle 7. These actions are complex because price decisions are made on the following PEC's: government estimates use a price based on FAR 15.804(C), cost analysis(G), CR Level I Review(K), CR Level II Review(L) or technical competition(Z). Time standard is 80 days.

4.1.8 Cycle 8 - Negotiated over \$10M

Competitive and noncompetitive negotiated contractual actions \$10 million and over are included in Cycle 8. Contractual actions in this cycle tend to be less complex because they often require minimum amount of technical evaluation. In cycle 8 the assumption is that the PR is accompanied by BSP, and Part 1 of Justification and Approval when required. Buyer is responsible for the Acquisition Plan and ideally is involved prior to receipt of the PR in PM. All cycle 8's require manual approval at HQ/AFLC. Time standard is 180 days.

4.1.9 Cycle 9 - Complex Actions between \$25,000 and \$100,000

These negotiated actions are noncompetitive. This cycle is used if the pricing decisions are made according to the following PEC's: C, G, K, L or Z. The standard is 95 days.

4.1.10 Cycle J, Class IVA Safety Modification Coverage.

This cycle includes actions which improve the existing capability of the weapon system in a manner that corrects a serious safety problem. The actions in this cycle are always sole source and are awarded as an unpriced order on an existing Basic Ordering Agreement or through a Letter Contract. The cycle standard is based on the assumption that the PR is accompanied by a complete Statement of Work and/or specification and a complete Justification and Approval. The time standard is 30 days.

4.1.11 Cycle W, Letter Contract Definitization.

This cycle assumes that a letter contract was issued with a firm proposal on hand. If the requirement for a firm proposal was waived by the Commander, then the assumption is that a not-to-exceed price was obtained from the contractor. The definitization cycle starts

the day after the letter contract is issued. The letter contract is issued under emergency situation to allow the contractor to start work immediately. The standard for definitization cycle is 180 days.

4.1.12 Cycle X, Contract Modification Definitization

The cycle begins following the issuance of a change order (Cycle S) which would result in negotiations. The negotiations involve adjustment to contract price or delivery schedule. The cycle is completed when the definitive contract modification is distributed. The standard is 180 days.

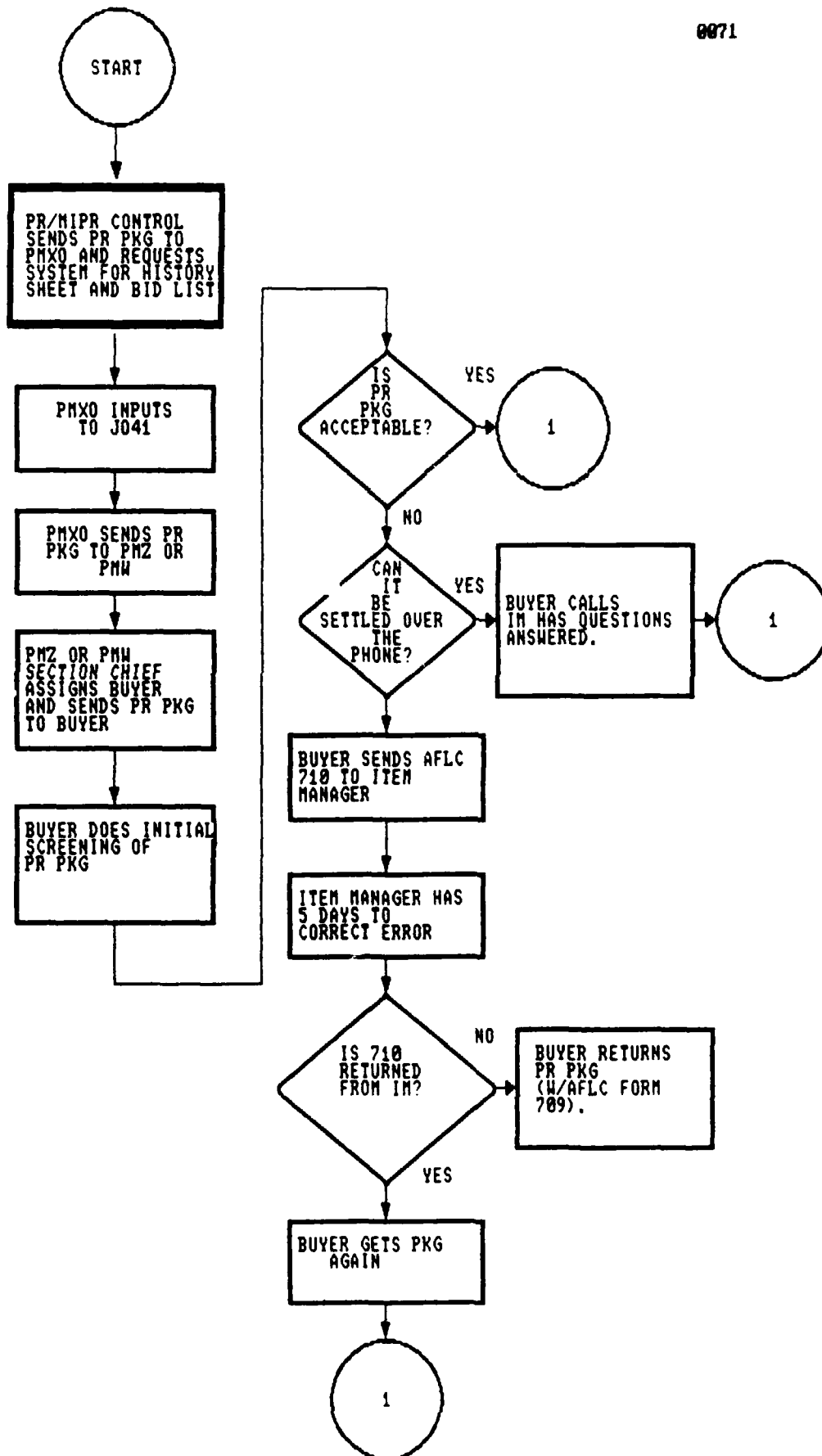
4.1.13 Cycle Y - Unpriced Basic Ordering Agreement (BOA) Definitization

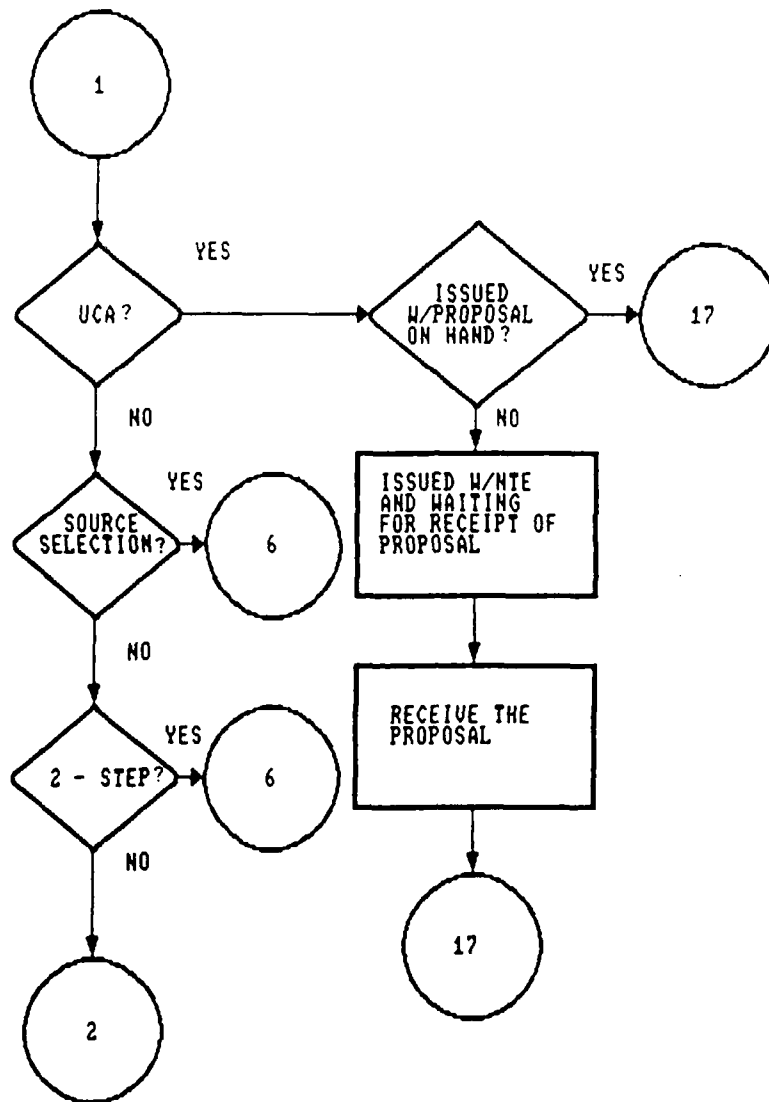
Items in this cycle are bilateral actions that definitize the issuance of an existing Unpriced BOA order. The cycle assumes that the buyer has a firm proposal on hand unless this requirement was waived by CC in the issuance cycle. Terms and conditions already exist in the BOA. The standard allowed is 150 days.

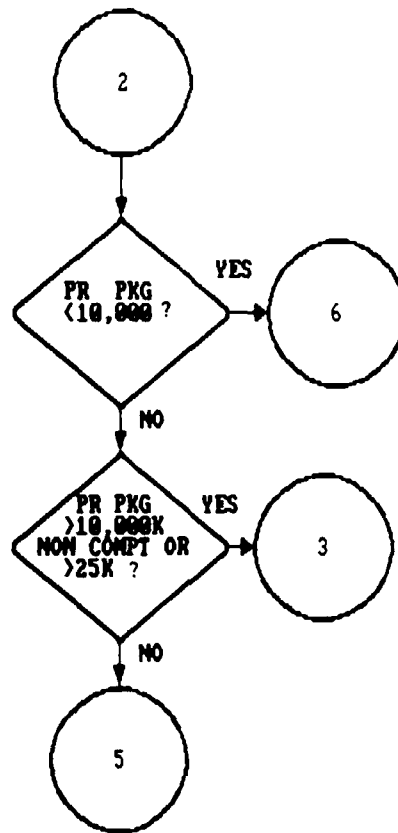
4.2 Contracting Flowchart

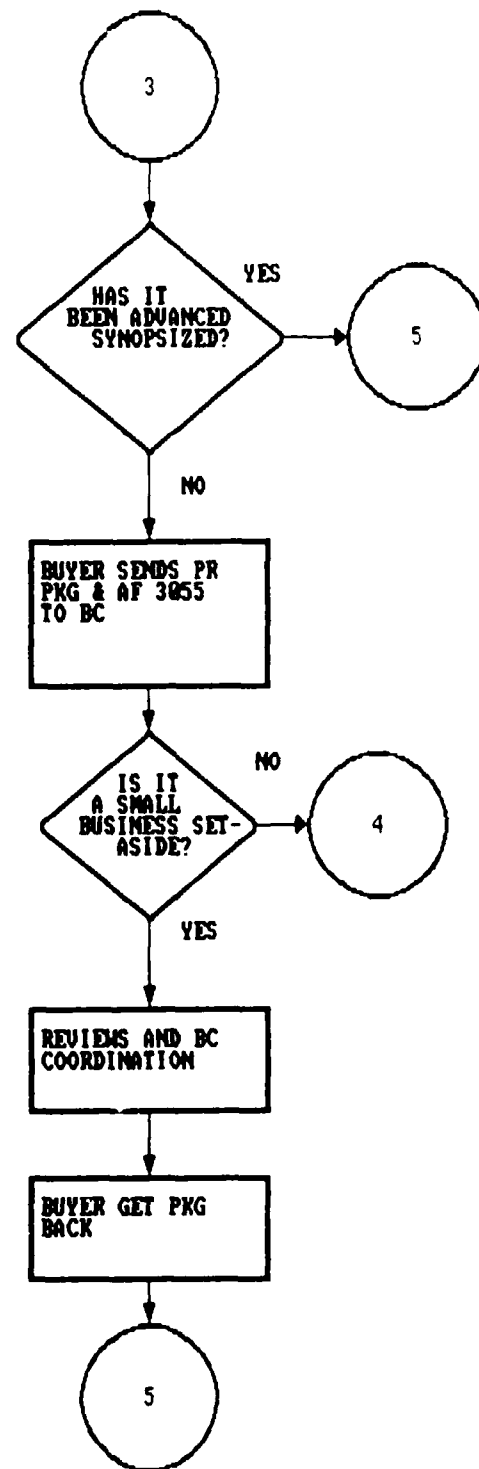
The updated flowchart is presented in the following section. The chart represents the flow process of the PR from the time the PR arrives in PM to the time the contract is awarded.

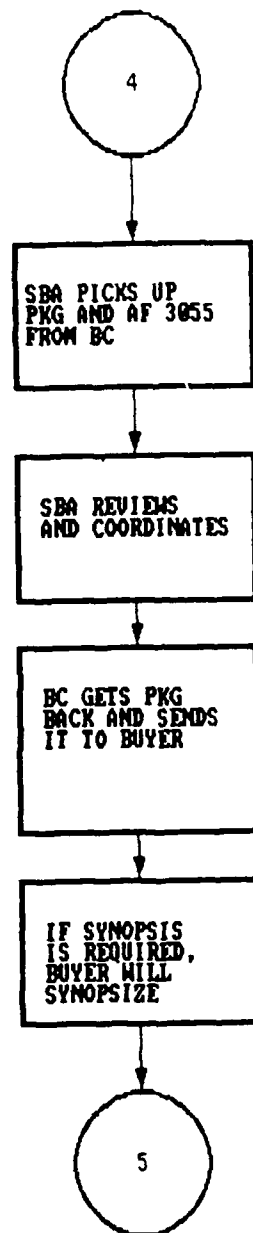
The flowchart covers all the actions studied under this effort. The chart is read sequentially. At branch points representing different processing requirements, the reader is referred to the next element by the numbers shown inside the circles. The chart shows both those elements which are common to all actions within the specific cycles as well as those which occur only on some of the contract actions processed. These charts represent the result of our review of the current Public Laws, AFLC policies and our on-site review of actual document processing. In addition they were used as a basis for discussion with individual buyers at the ALC's.

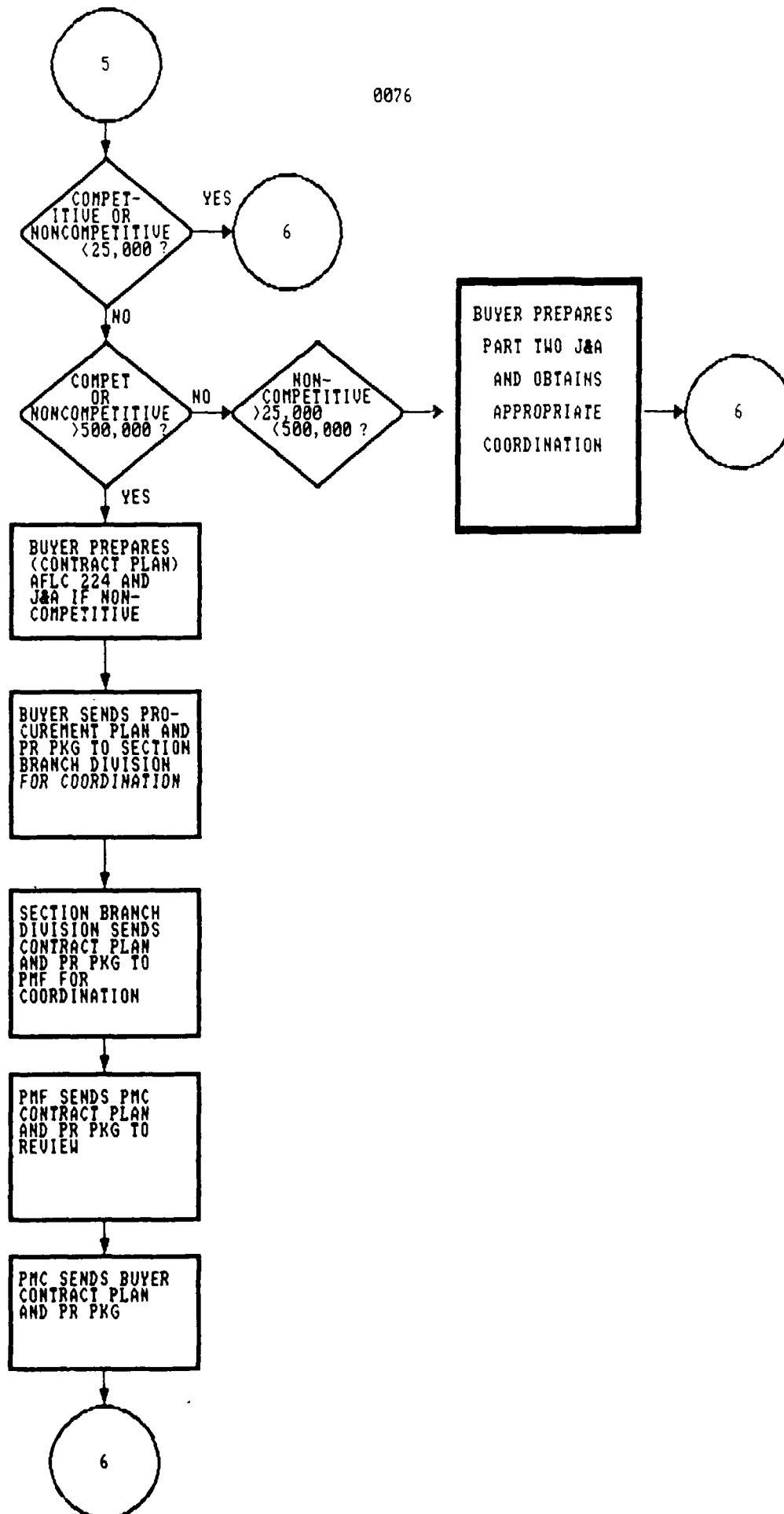


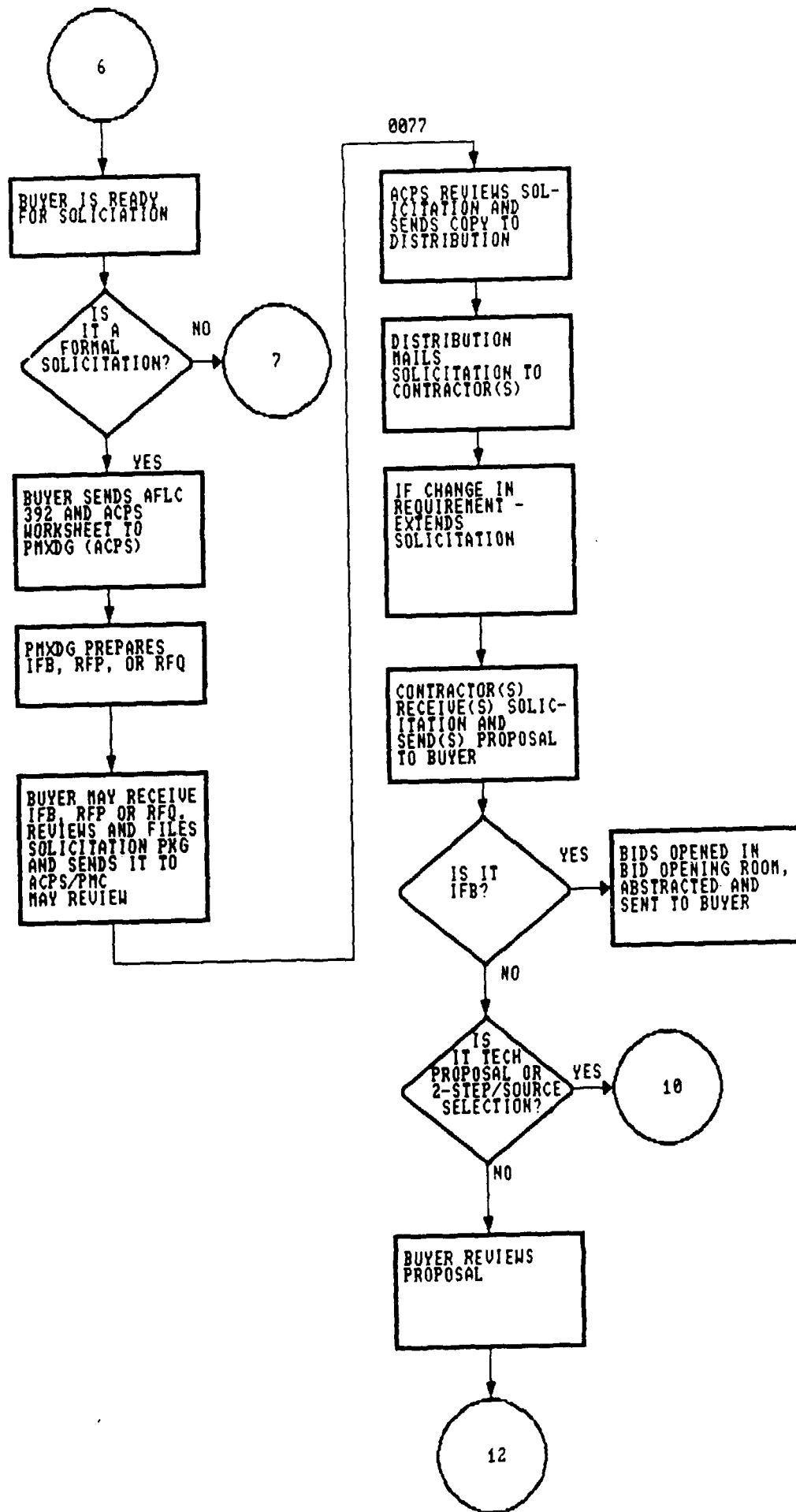


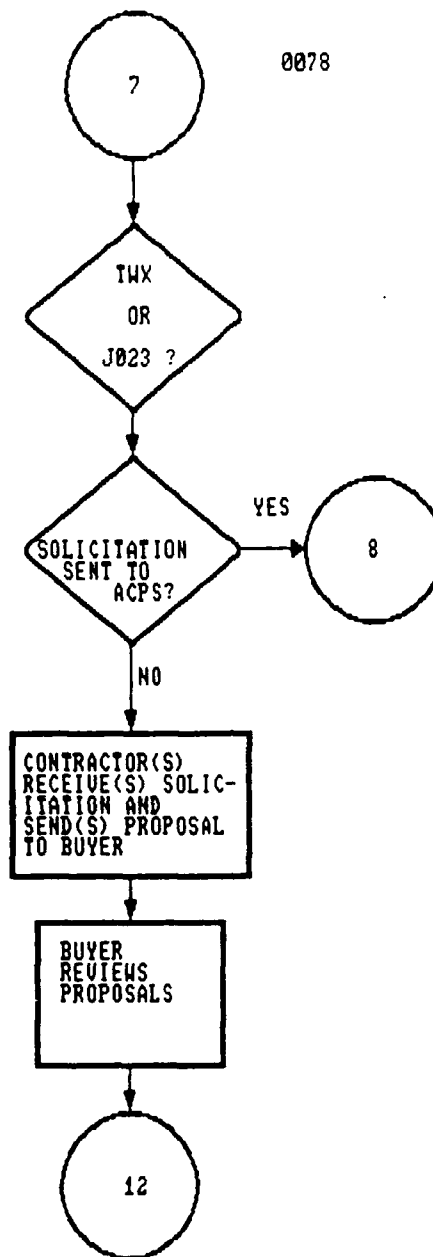




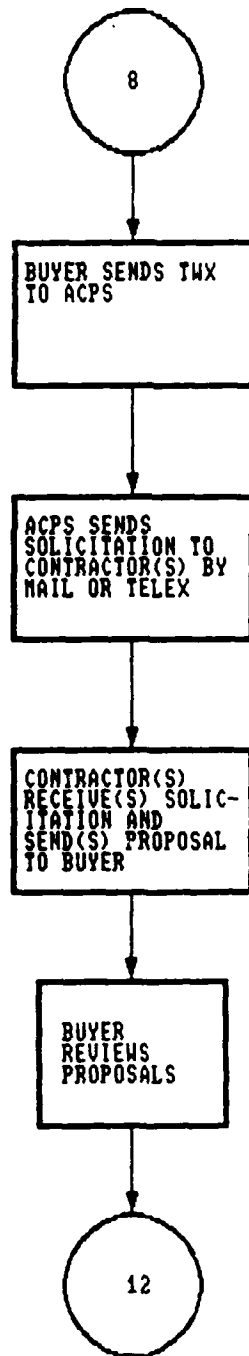




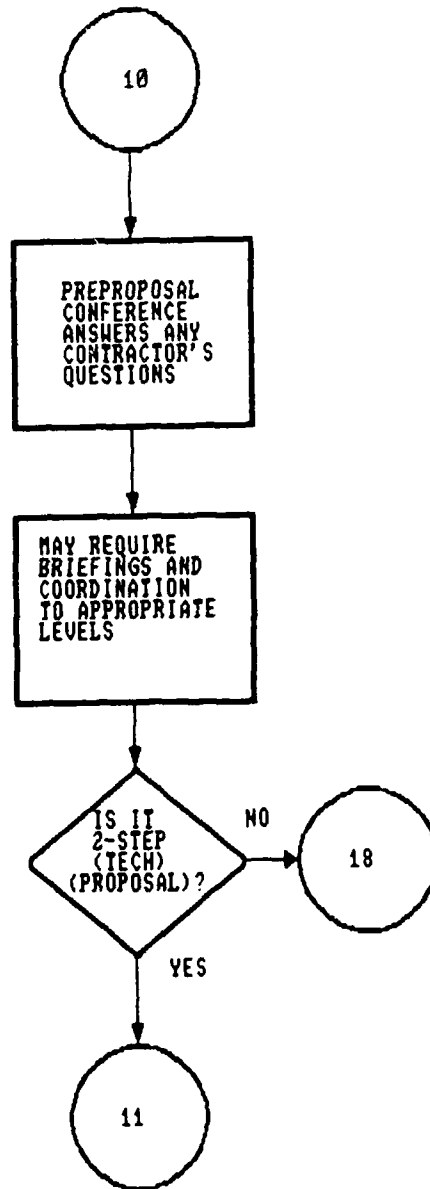


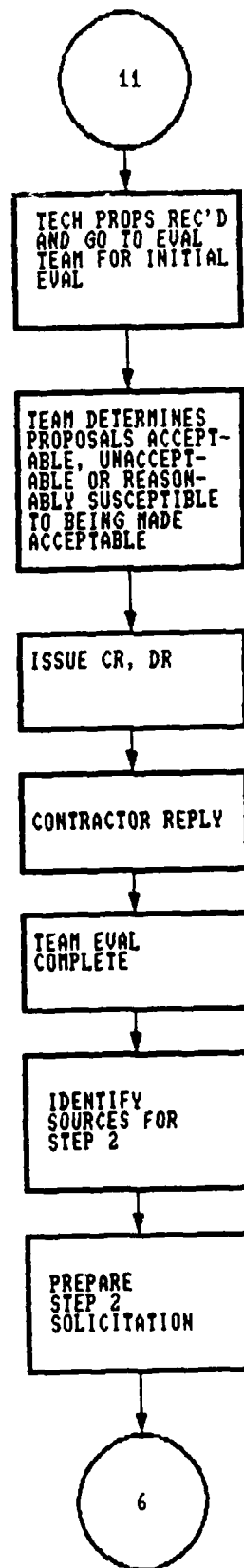


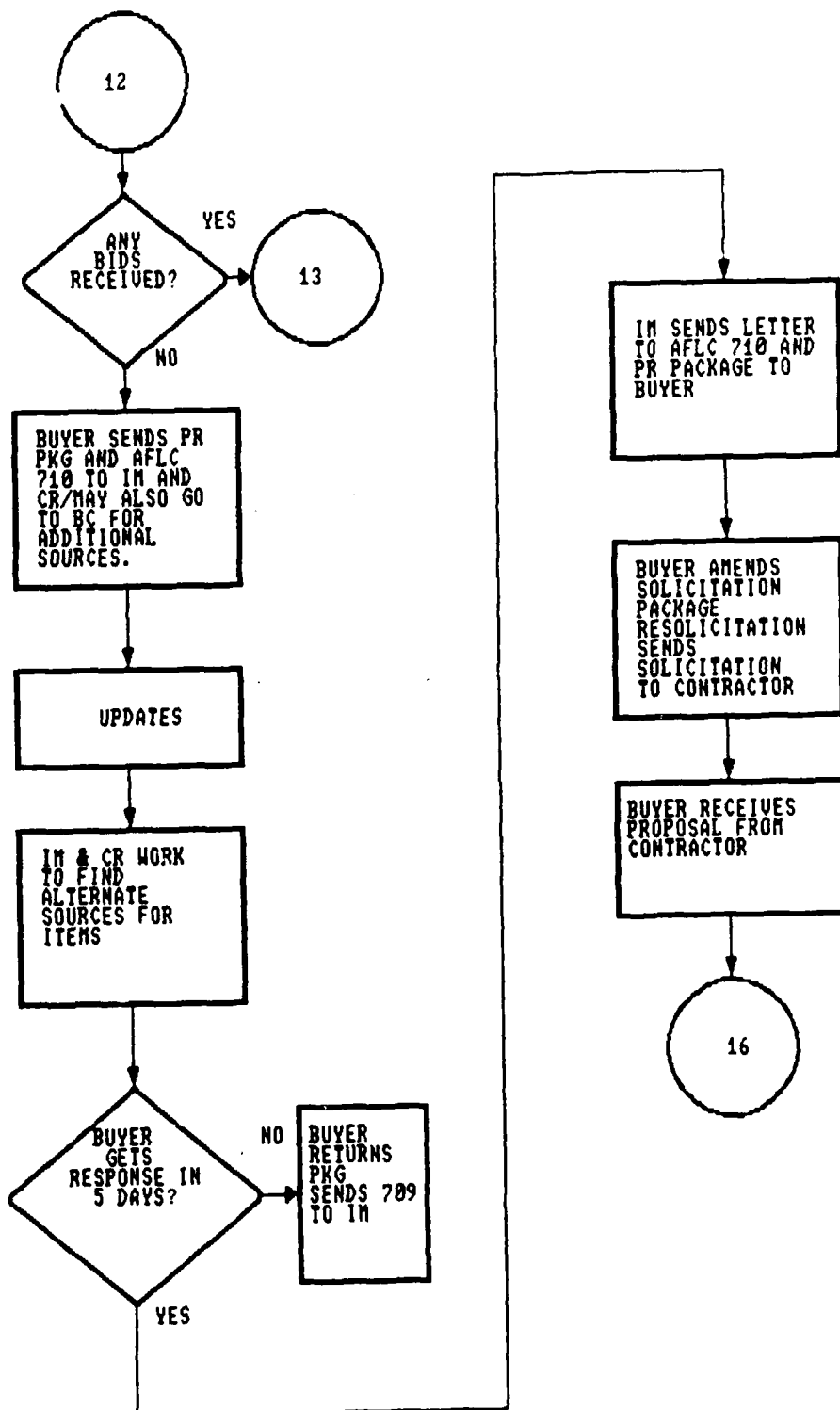
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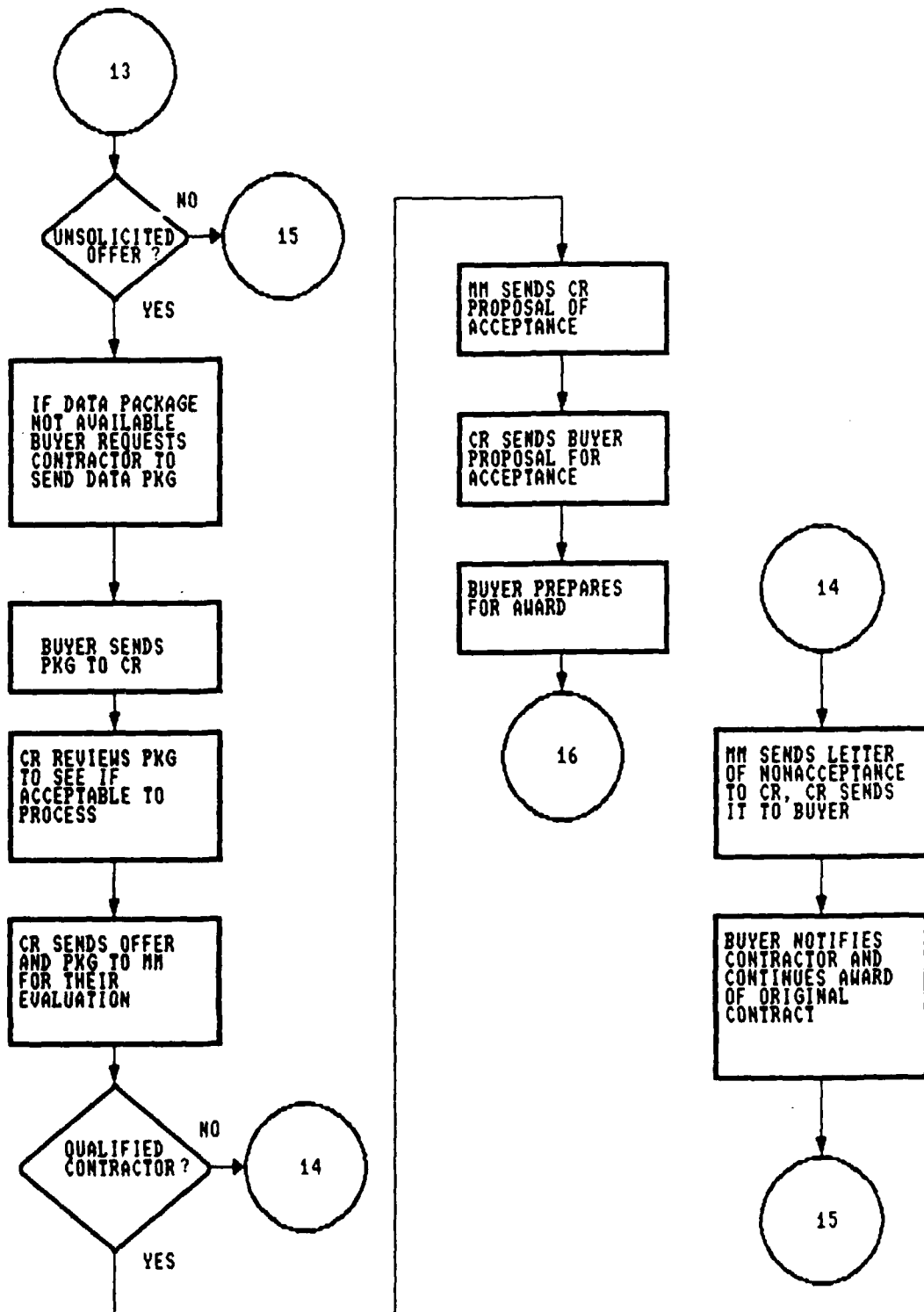


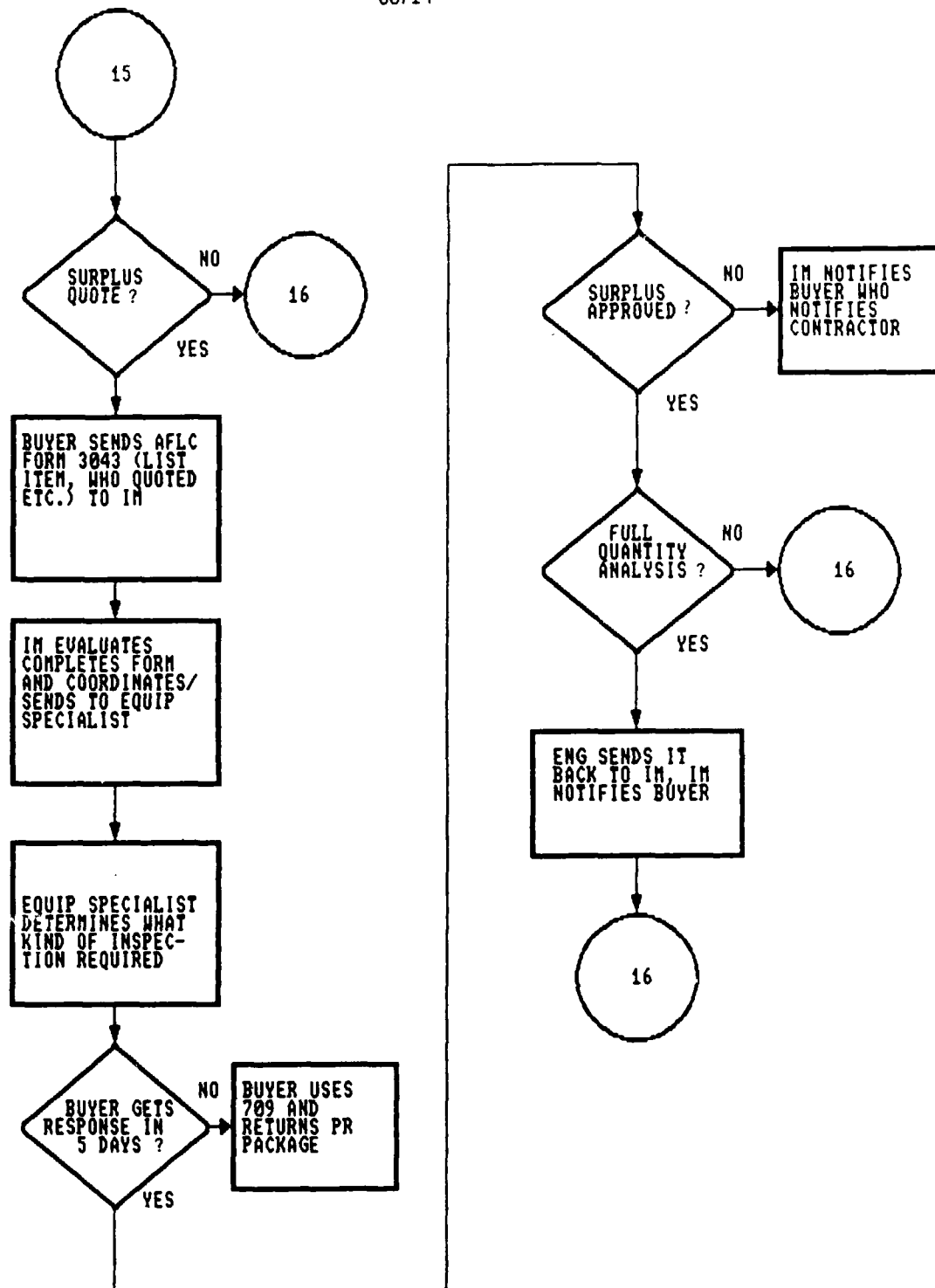
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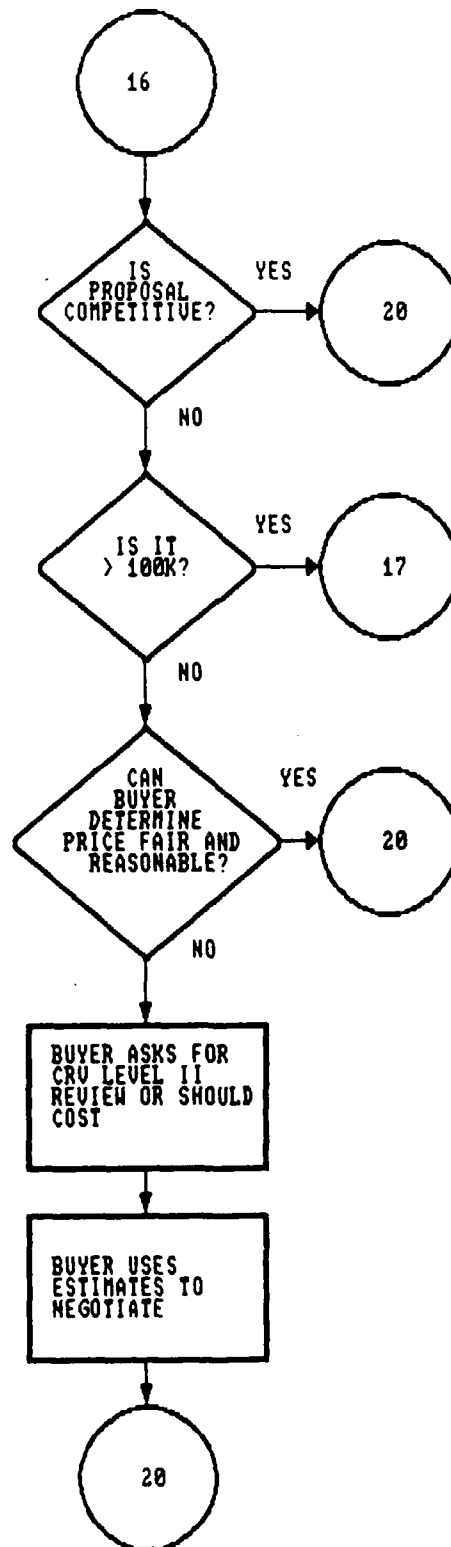


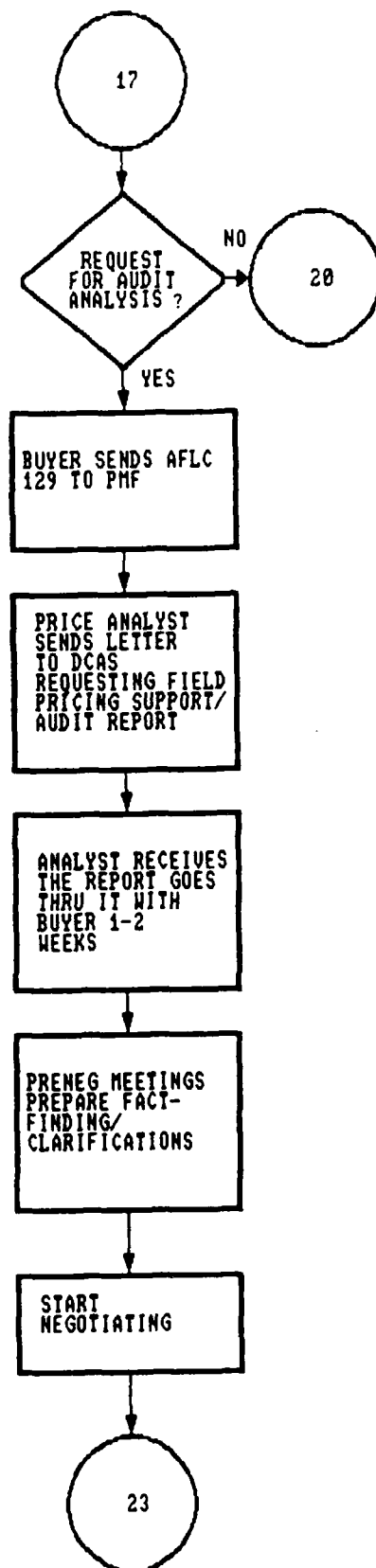


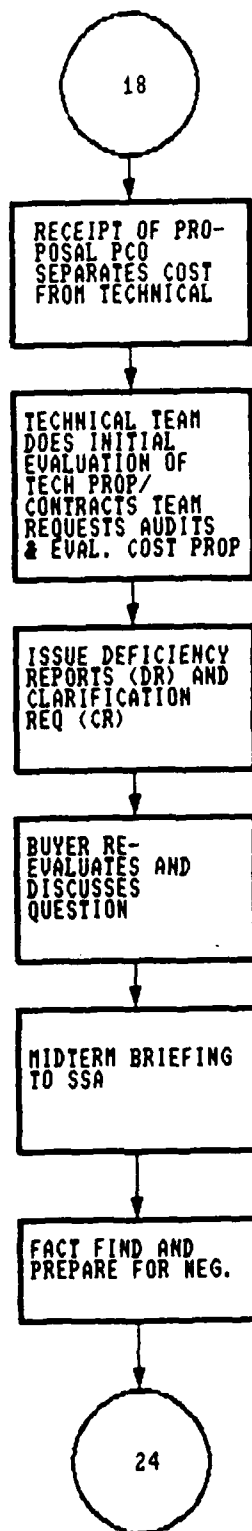


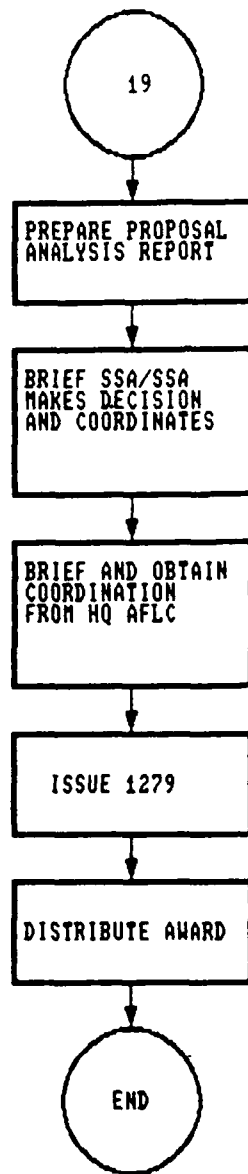


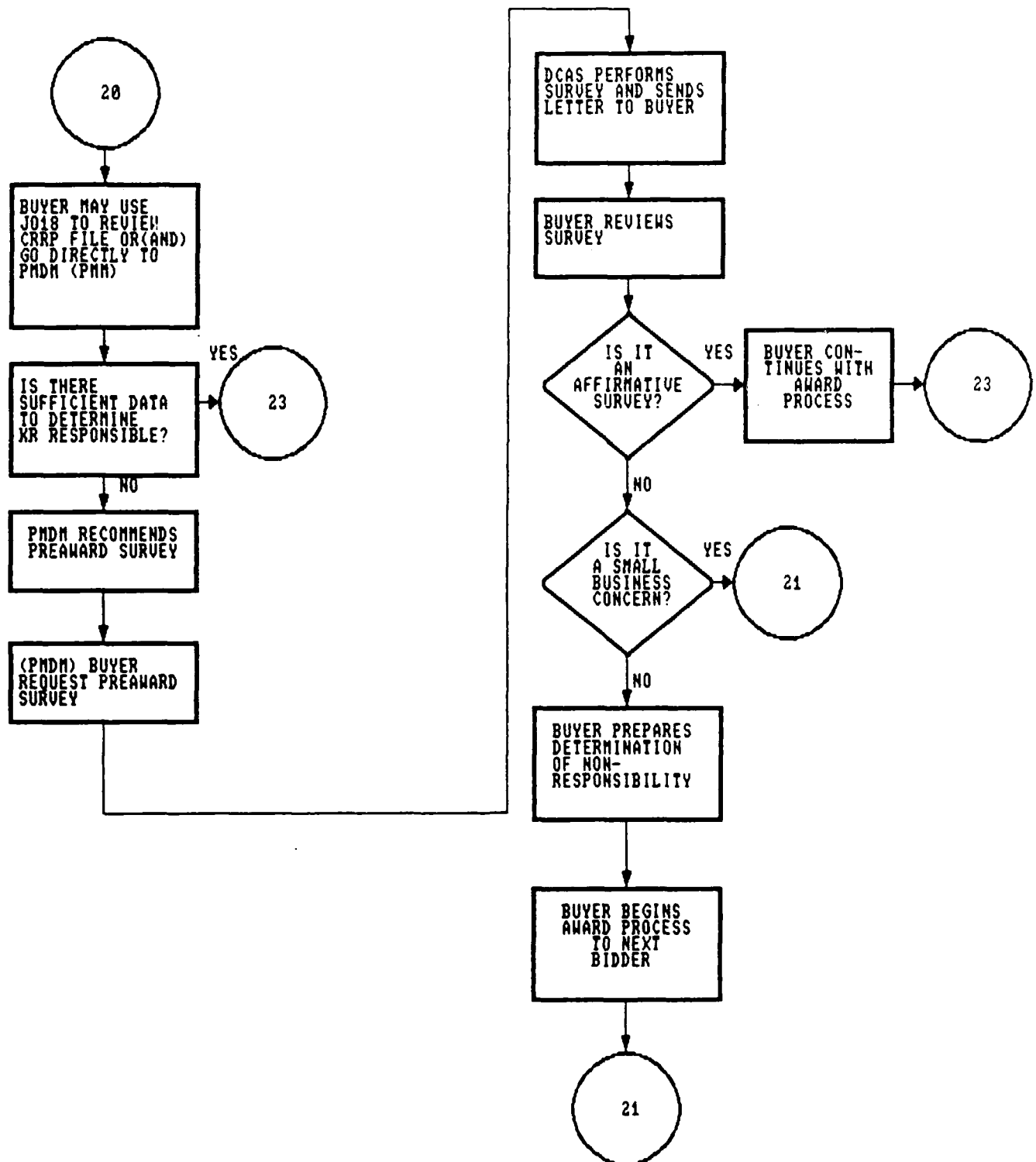




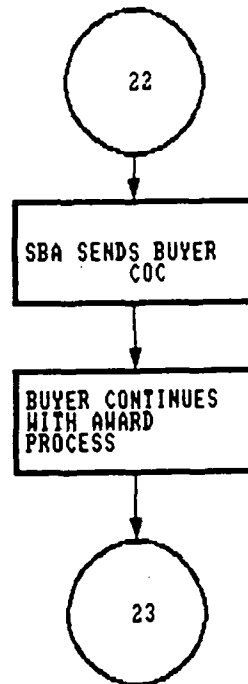
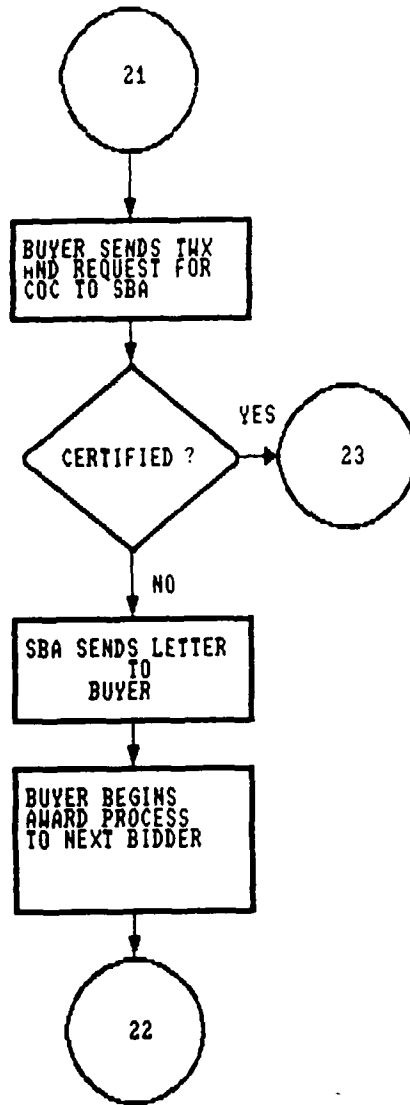




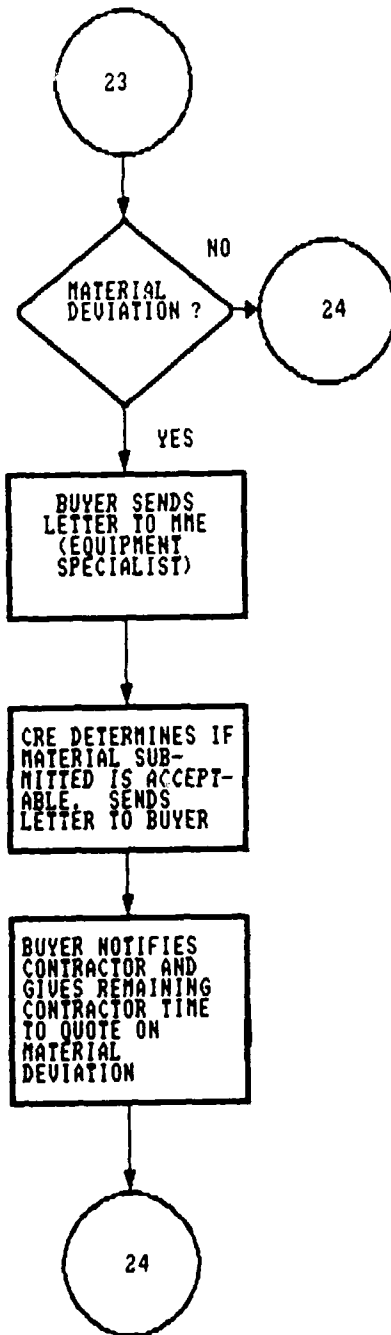


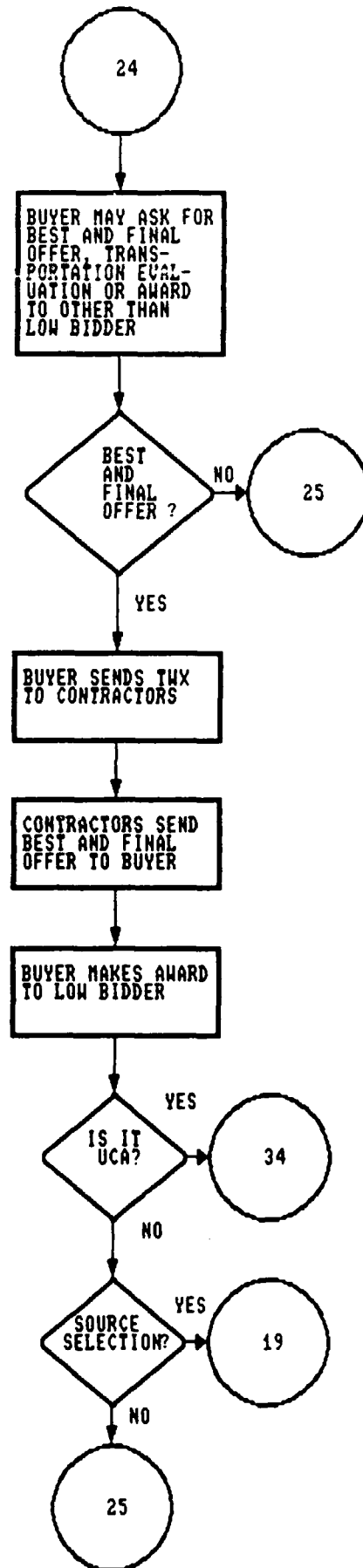


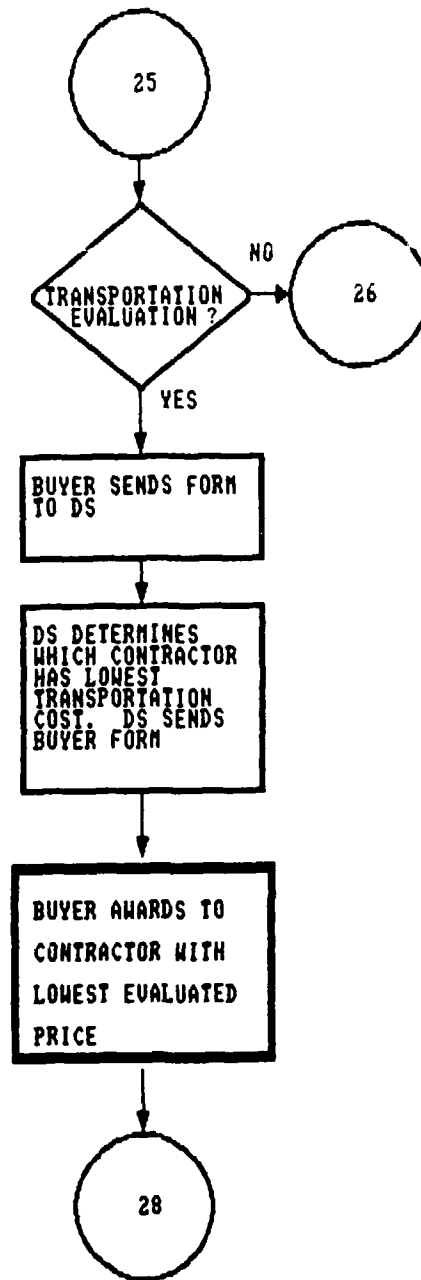
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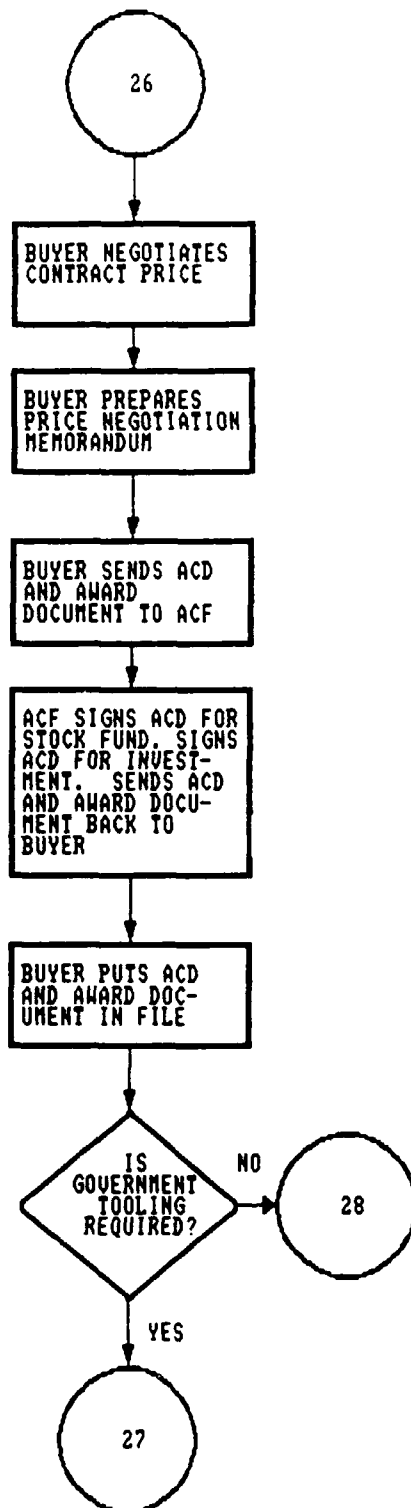


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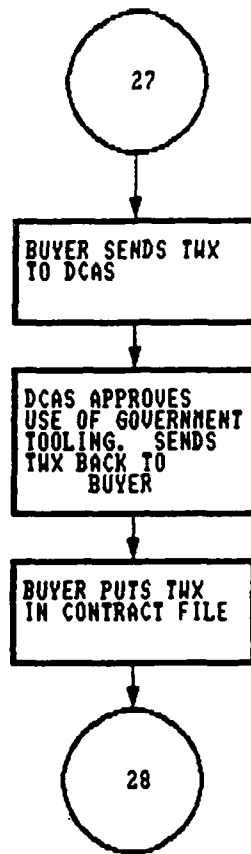


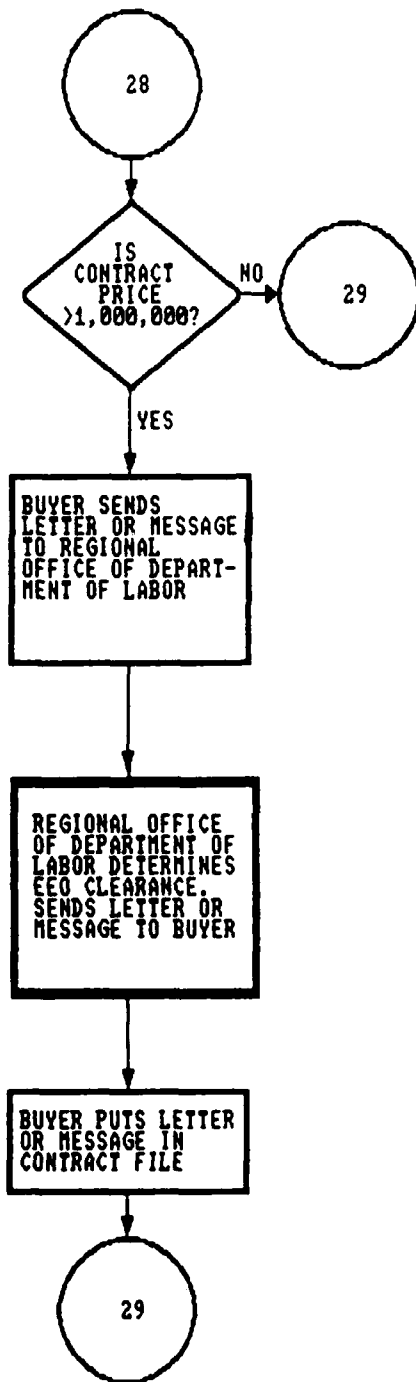


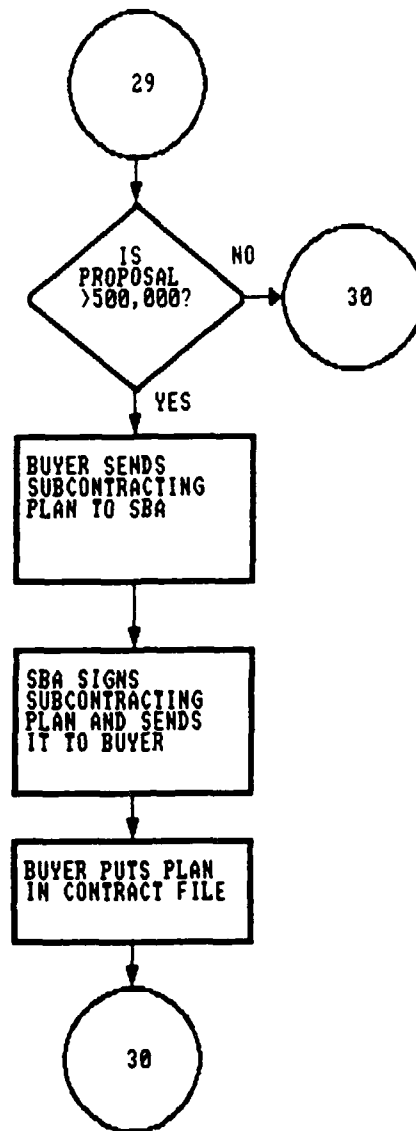


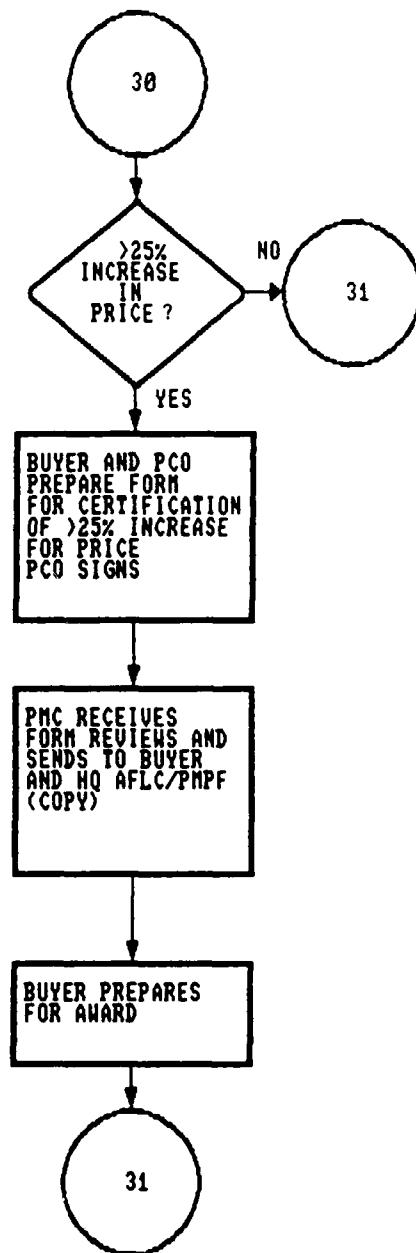


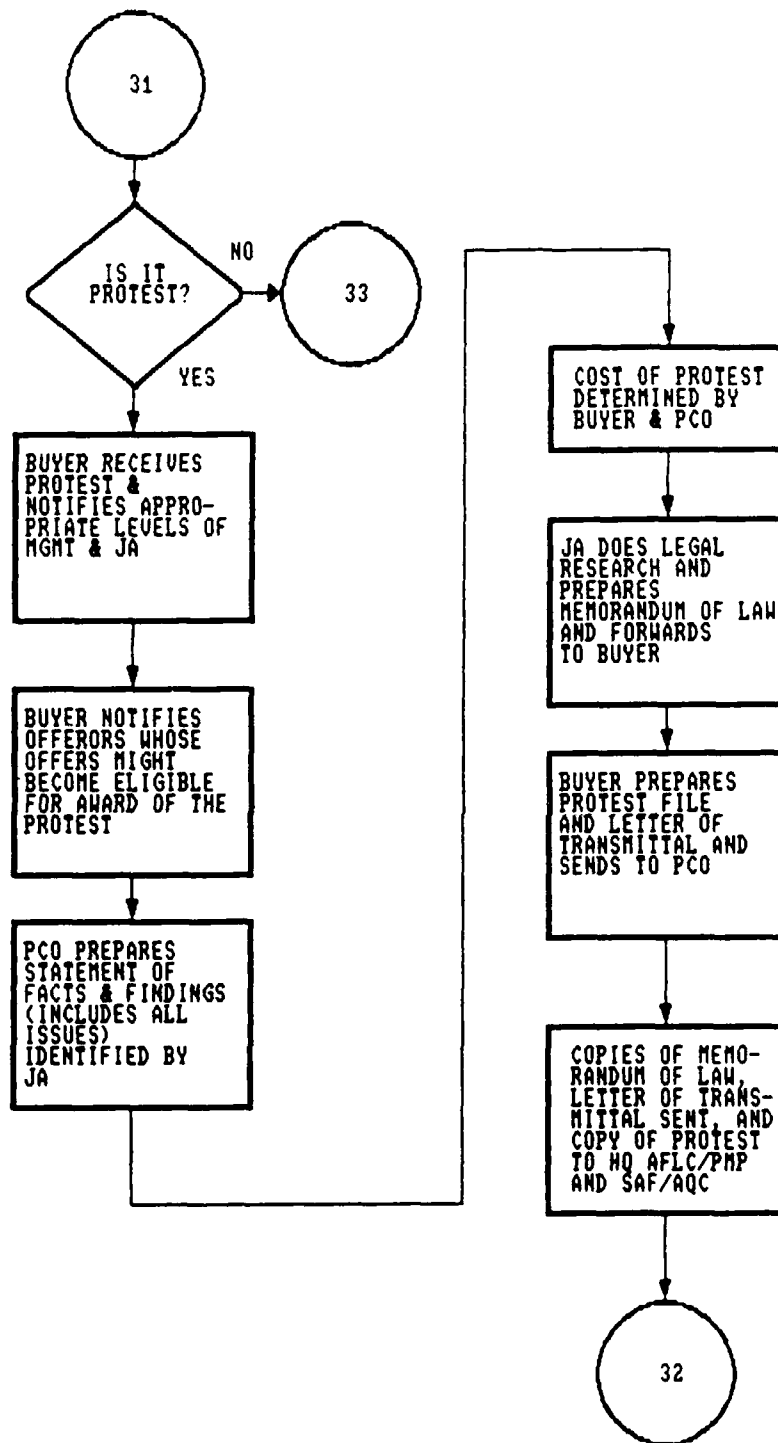
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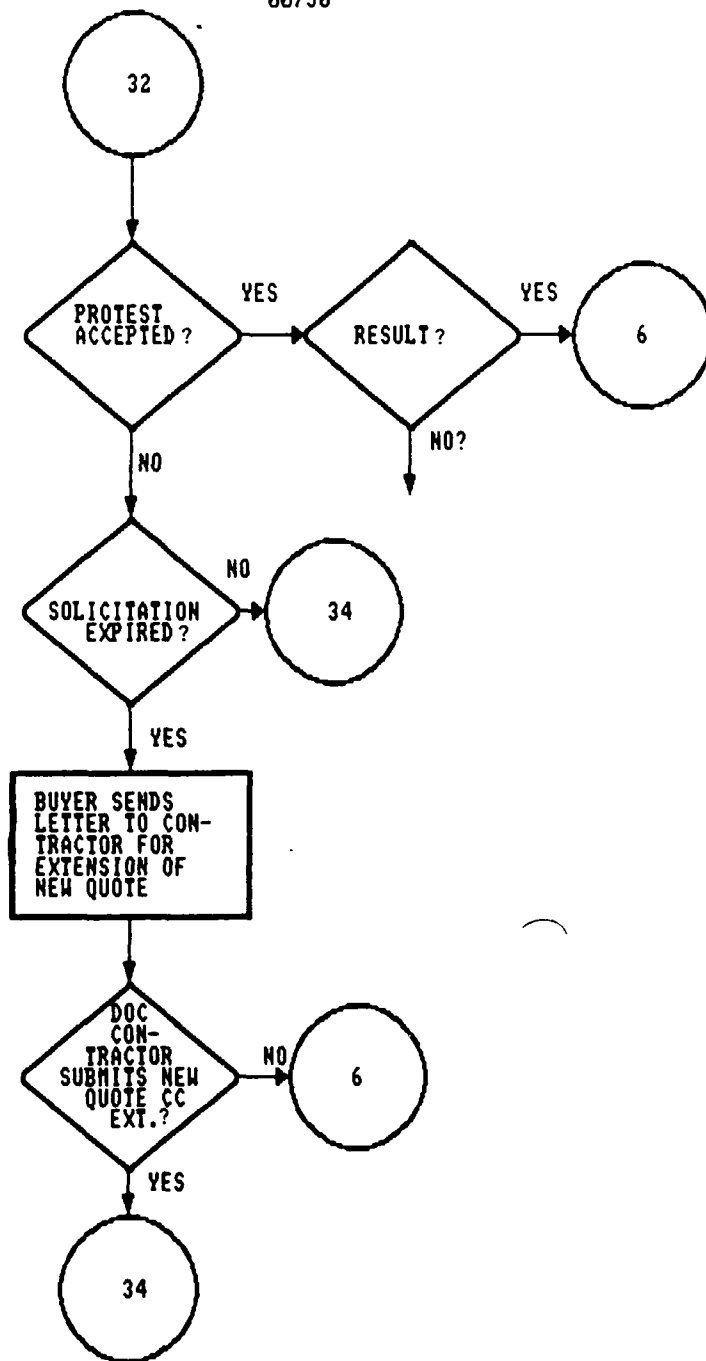


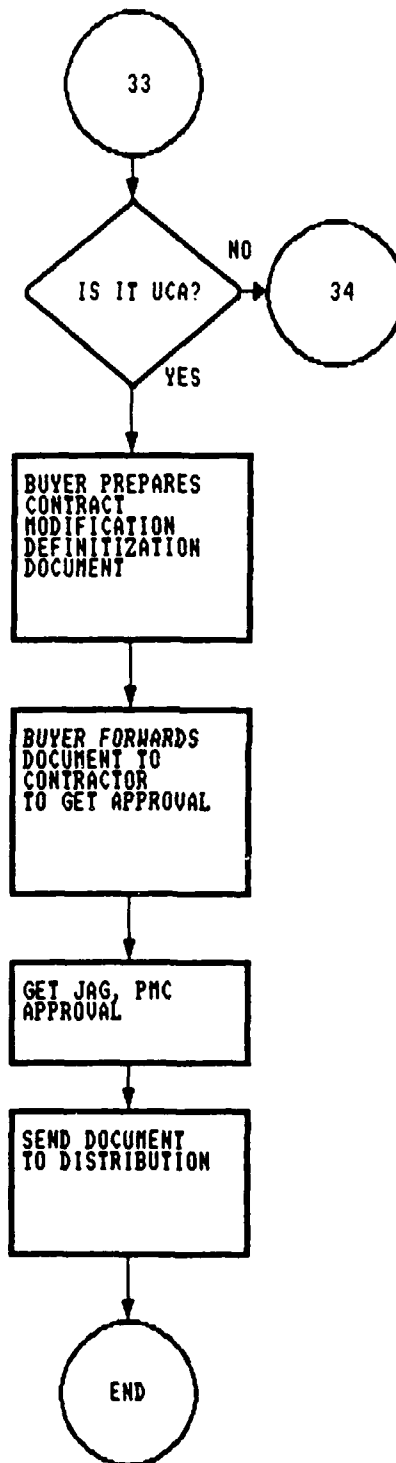


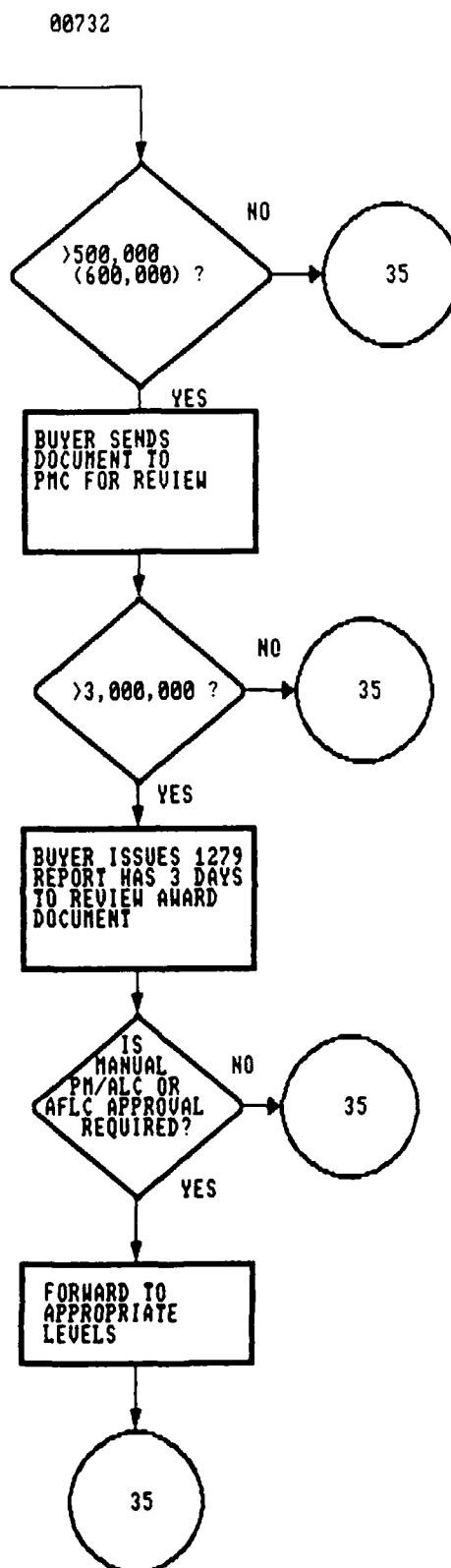
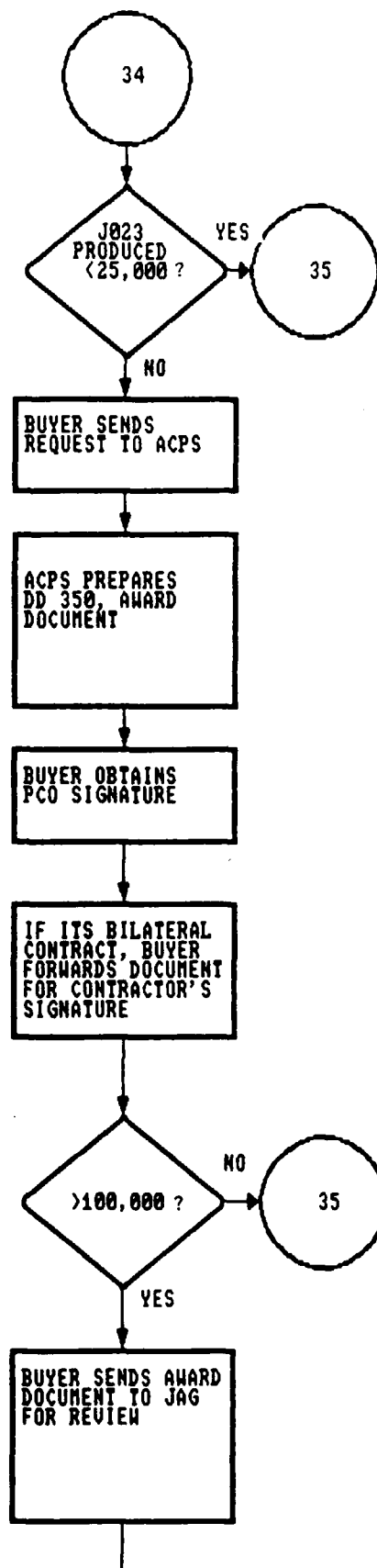




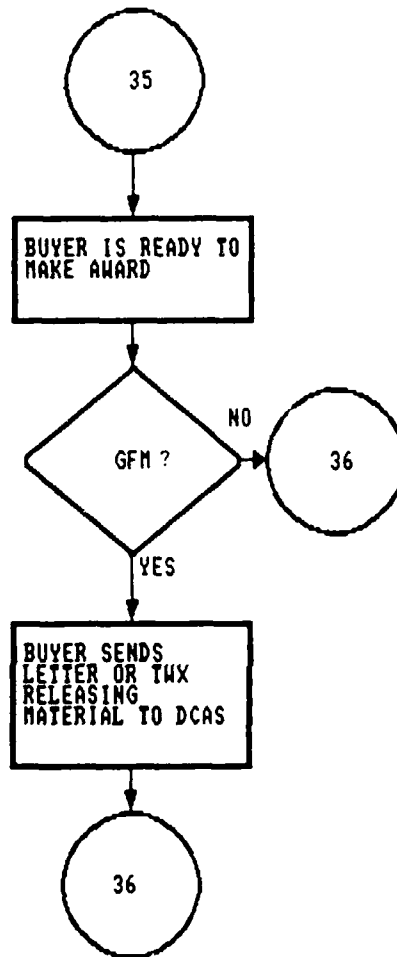
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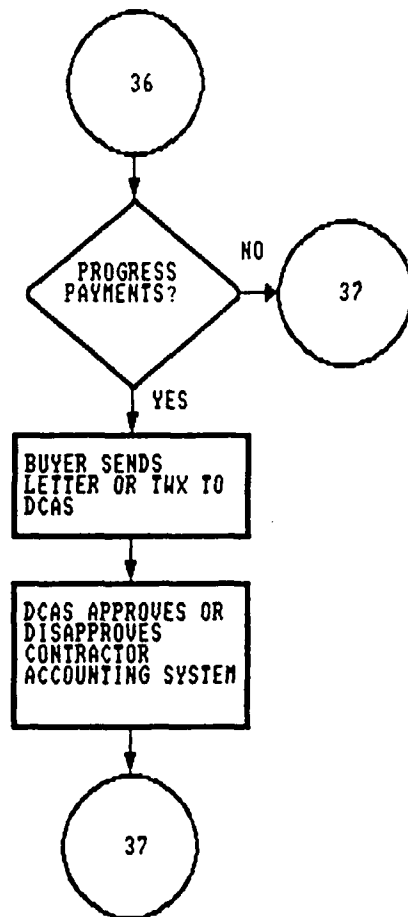




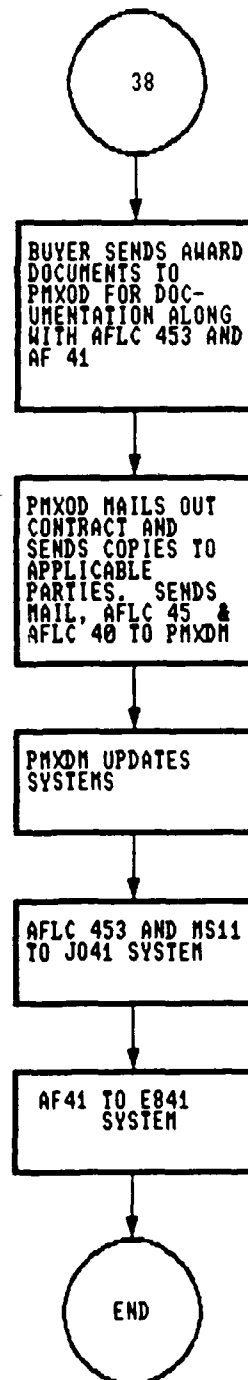
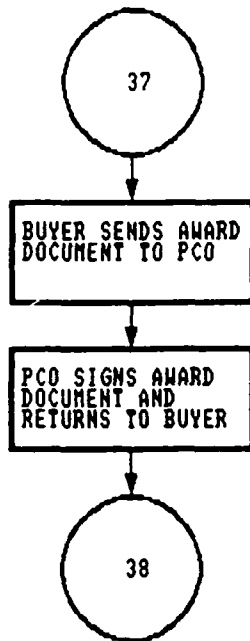
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4.3 Standard/Performance by Cycle/ALC

Figure 4-1 shows the Command average of processing days. This chart illustrates the problem Contracting and Manufacturing has been experiencing consistently in the time period shown. Figure 4-2 to 4-6 indicate the differences in the performance of the Air Logistic Centers. The first chart on each of the following pages shows the actual processing times for different dollar thresholds for Fiscal Year(FY 86). During FY 86 new cycle were established. The latest cycle standards were set forth in appendix 2 change to AFLCR 70-11 dated 25 October 1985, but the actual tracking according to the new cycles did not begin until later. Therefore the performance data for the cycles to be studied was limited.

Small Purch.		< 100K		100K - 10M		> 10M	
< 25K		(10K - 100K		(100K - 6 M		(> 6M	
FY 86	< 10K till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)
Oct	89	129	188	217			
Nov	91	126	190	203			
Dec	91	130	177	187			
Jan	91	133	186	237			
Feb	95	141	200	204			
Mar	89	139	205	277			
Apr	92	139	207	190			
May	96	136	207	254			
June	95	133	204	310			
July	97	137	201	243			
Aug	95	130	208	312			
Sep	104	147	211	280			

Cycle	1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	50	70	165	80	180	95	30	180	180	150
FY 87													
Oct	107.07	171.66	133	88.91	119.10	206.46	114.15	301.54	163.69	143	159.33	267.20	226.16
Nov	88	0.0	212	90.06	126.17	200.26	115.70	349.74	167.45	0.00	96.25	325.33	226.84
Dec	77.2	89.5	0.00	92.90	125.45	233.11	118.99	250.56	163.46	0.00	313.75	255.72	313.82
Jan	132	308.6	0.00	91.56	136.74	218.90	119.64	250.58	178.05	0.00	283.09	268.08	374.39
Feb	125.69	566	0.00	90.74	131.77	222.35	120	199.89	180.95	0.00	164	300.83	251.53
Mar	102.38	91	0.00	89.94	133.93	239.24	121.89	192.73	178.29	0.00	242.52	310.97	179.45
Avg	105	245	173	91	129	220	118	258	172	143	210	288	262
Perf	1.17	1.23	.86	1.81	1.1	1.0	1.5	1.43	1.88	4.76	1.16	1.6	1.74

Figure 4-1 Average - Processing Days - ALC

FY 86	< 25K	(10 - 100K till Mar)	(100K - 6 M till Mar)	(> 6M till Mar)
Oct	101	120	161	175
Nov	109	125	179	274
Dec	113	123	172	286
Jan	105	130	184	285
Feb	113	145	184	197
Mar	112	147	202	404
Apr	108	147	217	211
May	117	142	193	256
June	121	150	221	293
July	129	144	210	378
Aug	130	160	239	293
Sep	123	164	243	270

Cycles	1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	50	70	165	80	180	95	30	180	180	150
FY 87													
Oct	100	0.00	0.00	99.89	116.07	233.35	143.83	210	173.83	0.00	0.00	498	226.66
Nov	0.00	0.00	212.00	100.73	142.15	213.75	150.55	260	200	0.00	198	0	384.75
Dec	66.00	0.00	0.00	111.05	138.25	244.53	155.52	246.66	177.34	0.00	893.00	170.0	339.754
Jan	0.00	0.00	0.00	95.63	134.90	234.96	148.82	293.5	203.03	0.00	291.66	315.00	486.77
Feb	0.00	0.00	0.00	97.33	138.9	255.65	156.83	310.00	200.86	0.00	116.00	496.50	399.00
Mar	0.00	91.00	0.00	103.11	133.87	277.61	145.94	194.57	182.33	0.00	455.75	385.33	261.00
Aug	83	91	212	101	134	243	150	252	190	0.00	391	373	350
Perf	.92	.45	1.06	2.02	1.91	1.47	1.87	1.40	2	0.00	217	2.07	2.33

Figure 4-2 Average Processing days - OCALC

Small Purch.		< 100,000		100K - 10M		> 10M	
< 25K		(70 - 100K		(100K - 6 M		(> 6M	
FY 86	< 10K till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)
Oct	59	94	176	139			
Nov	56	97	171	245			
Dec	58	111	146	171			
Jan	64	100	163	186			
Feb	62	107	190	173			
Mar	62	111	181	296			
Apr	64	107	157	168			
May	78	114	240	206			
June	70	91	169	476			
July	72	103	167	130			
Aug	78	107	153	345			
Sep	78	104	164	484			

Cycles	1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	50	70	165	80	180	95	30	180	180	150
FY 87													
Oct	81.07	214.00	133	63.60	100.78	153.39	77.31	380.33	122.76	0.00	1.00	213.00	0
Nov	84.50	0.00	0.00	58.87	92.47	135.11	83.98	542.50	105.38	0.00	0.00	188.00	125.16
Dec	71	1.00	0.00	71.13	97.26	162.58	83.69	364.33	120.49	0.00	0.00	0.00	49.66
Jan	85.25	193	0.00	66.95	101.45	186.57	80.64	204.00	131.55	0.00	232.5	0.00	0.00
Feb	103.00	566.00	0.00	57.22	93.63	169.09	82.10	180.00	118.91	0.00	116.00	0.00	116.50
Mar	100.00	0.00	0.00	53.42	87.08	163.10	77.56	70.00	115.03	0.00	158.00	0.00	52.00
Avg	87	244	133	62	95	162	81	290	119	0.00	127	20	86
perf	.97	1.21	.66	1.23	1.36	.97	1.01	1.61	1.25	0.00	.70	1.11	.57

Figure 4-3 Average Processing Days - OOALC

FY 86	< 25K			(10 - 100K		(100K - 6 M		(> 6M	
	< 10K till Mar)			till Mar)		till Mar)		till Mar)	
Oct	92	171	223	239					
Nov	90	146	189	65					
Dec	90	147	191	141					
Jan	98	145	201	36					
Feb	102	149	181	215					
Mar	91	139	204	155					
Apr	96	139	220	212					
May	96	146	209	154					
June	96	148	194	159					
July	98	159	211	270					
Aug	109	154	196	296					
Sep	107	171	203	193					

Cycles	1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	50	70	165	80	180	95	30	180	180	150
FY 87													
Oct	134.11	0.00	0.00	87.27	168.19	210.80	120.48	263.33	166	0.00	306	177	140.50
Nov	95	0.00	0.00	98.43	175.68	234.46	123.18	288	167		155	0	440
Dec	83	178	0.00	96.21	160.69	226.10	132.45	234.5	172.4		491	160.66	438.37
Jan	150.70	278.00	0.00	94.15	179.21	223.00	125.42	182.00	174.71	0.00	0.00	215.00	295.00
Feb	130.71	0.00	0.00	95.27	198.94	221.16	131.10	173.33	182.84	0.00	0.00	194.00	0.00
Mar	106.20	0.00	0.00	98.04	191.97	231.88	137.74	265.50	198.62	0.00	0.00	0.00	246
Avg	117	228	0.00	95	179	225	128	234	177	0.00	317	187	2.08
Perf	1.29	1.14	0.00	1.89	2.56	1.36	1.60	1.30	1.86	0.00	1.76	1.03	312

Figure 4-4 Average Processing Days - SAALC

Small Purch.		< 100,000		100K - 10M		> 10M	
< 25K		(70 - 100K		(100K - 6 M		(> 6M	
FY 86	< 10K till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)	till Mar)
Oct	81	96	160	242			
Nov	82	98	159	157			
Dec	88	111	131	180			
Jan	78	111	124	301			
Feb	89	119	165	142			
Mar	87	116	203	291			
Apr	88	125	169	0			
May	79	130	213	0			
June	86	123	175	0			
July	90	141	197	156			
Aug	92	145	209	0			
Sep	100	147	224	0			

Cycles	1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	50	70	165	80	180	95	30	180	180	150
FY 87													
Oct	0.00	150.50	0.00	92.75	137.94	214.37	116.18	0	160.60	0	0	0	378.50
Nov	0.00	0.00	0.00	82.07	166.66	210.75	133.08	0.00	151.76	0	181.00	439	352
Dec	0.00	0.00	0.00	74.28	147.72	278.85	107.10	134	162.12	0	433	436.5	237.5
Jan	0.00	0.00	0.00	81.10	202.55	207.37	116.62	0.00	180.06	0	0.00	0.00	0.00
Feb	0.00	0.00	0.00	78.43	142.80	228.06	107.43	0.00	170.37	0	159.50	0.00	408.50
Mar	0.00	0.00	0.00	76.52	154.40	248.58	106.31	0.00	164.46	0	0.00	393.00	168.50
Avg	0.00	150.5		81	159	231	114	134	165	0	258	423	309
Perf	0.00	.75		1.62	2.20	1.4	1.43	.74	1.73		1.43	2.34	2.06

Figure 4-5 Average Processing Days - SMALC

		< 25K		(10 - 100K		(100K - 6 M		> 6M	
FY 86		< 10K till Mar)		till Mar)		till Mar)		till Mar)	
Oct	109	108		242		329			
Nov	103	144		236		212			
Dec	99	162		214		247			
Jan	96	162		208		260			
Feb	96	157		268		246			
Mar	87	158		243		243			
Apr	89	144		236		241			
May	92	139		195		313			
June	91	135		209		358			
July	93	142		210		176			
Aug	96	136		199		276			
Sep	93	124		189		199			

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Cycles		1	2	3	4	5	6	7	8	9	J	W	X	Y
Std	90	200	200	200	50	70	165	80	180	95	30	180	180	150
FY 87														
Oct	235	0.00	0.00	0.00	77.04	113.10	175.97	92.13	378	161.31	143.00	171	271	198.60
Nov	102	0.00	0.00	0.00	88.72	118.97	173.62	91.71	0.00	153.03	0	47.2	55	0.00
Dec	0.00	0.00	0.00	0.00	85.52	137.23	216.19	103.16	0	135.54	0	138.6	0	185.50
Jan	0.00	683.00	0.00	0.00	102.92	141.22	219.92	113.48	360.00	152.43	0	298.20	274.25	215.33
Feb	136.00	0.00	0.00	0.00	105.02	140.54	207.26	107.89	169.75	183.29	0	199.00	212	170.50
Mar	0.00	0.00	0.00	0.00	89.3	143	235.9	112.1	214.5	169	0	194.5	154.6	148.1
Avg	158	683	0.00	0.00	91	132	205	103	281	159	143	175	193	153
Perf	1.76	2.41	0.00	0.00	1.83	1.89	1.24	1.29	1.55	1.67	4.77	.97	1.07	1.02

Figure 4-6 Average Processing Days - WRALC

5 CONTRACTING FLOW ELEMENTS

5.1 Involved Organizational Elements

There are a number of organizations which are involved in the processing of contractual actions within AFLC. The paragraphs below summarize the major functions of these organizations.

5.1.1 PMW/PMZ

Each Air Logistics Center has two buying divisions, the Commodities Contracting Division (PMZ) and the Weapons System and Major Equipment Division (PMW). PMW is responsible for providing logistical support for weapons for the AF and other government agencies. PMZ is responsible for hardware accessories such as wheels, brakes and airborne radar. The divisions are divided into branches then further subdivided into sections. The section is the level at which the contracting actions are accomplished. Primary responsibility for supervision of the buyers and for management of performance against cycle standards is at the section chief level.

5.1.2 PMX

The Systems and Support Services Division (PMX) is the administrative office which provides services and support to all central and base contracting functions. In this division, the Systems Management Branch has the responsibility for all data systems. The Operations Support Branch is responsible for administrative functions such as synopsis, solicitations and TWX operation. The Contract Analysis and Management Branch provides support for resources and personnel management. PMX provides the Contracting and Manufacturing Directorate with policies and plans for mission support.

The major data systems in this directorate are J041, J023 and J018. The Acquisition Due in System (J041) has two objectives:

maintain all the data pertaining to acquisitions in process, and maintain the due in status and workload control. J023 is the automated purchase system which can be used to process actions under \$25K. J018 combines the J041, E841 (manpower standards) and H057 (funds tracking) systems.

PMXO is responsible for receipt, control, preparation and distribution of contractual actions. Performance of PMXO affects the cycle performance since they must provide timely support to the various functions. PMXO stamps the date of Purchase Request (PR) receipt. The J041 clerk then logs it into the system. This action may take one to three days. The Purchase Request is then forwarded to the appropriate buying branches. From there the PR is forwarded to section chief for assignment to a buyer. The Advance Synopsis team are also members of PMXO.

5.1.3 PMC

The Contracts Committee (PMC) is regarded as advisors for the Director, Deputy Director and Directorate offices. PMC also counsels buying personnel and PCO's on any preaward contractual problems. PMC has various functions from implementing new policy decisions to reviewing and coordinating on contract documents. The following actions require PMC review: protests before and after award, all contract plans, basic ordering agreement and letter contracts. Each ALC has a different dollar threshold requirement for the committee to review individual contractual actions. Figure 5-1 shows this variation. In addition, PMC also reviews Acquisition Plans, Business Strategy Panels, Source Selection Plans and it may also review solicitations. PMC is generally structured so people specialize in the type of reviews they perform. It takes an average of 3-5 days to review the contract and solicitation documents. Reviews are performed on a first in - first out basis unless the document is for an emergency or urgent requirement. Protest must be handled in an expeditious manner. The backlog in PMC may have an impact on the time it takes to perform a review.

<u>ALC</u>	<u>Review Threshold</u>
OCALC	\$200K
OOALC	\$500K
SAALC	\$500K
SMALC	\$600K
WRALC	\$500K

Figure 5-1 PMC Review Thresholds

5.1.4 PMF

The Pricing and Finance Division has the function of implementing pricing policies and procedures directed in the FAR, AFLC FAR Sup and AFLCR 70-18 for the respective ALC's. In addition to being responsible for contract financing and audit reports, PMF is also responsible for economic price adjustment, defective pricing, and the Spares Management Analysis and Review Technique (SMART). PMF has a Preanalysis Group which determines if a proposal is complete when it initially comes to Pricing. The group then prepares a letter to the Defense Contract Audit Agency (DCAA) and/or the Contract Administration Office (CAO) requesting field assistance. The buyer or PCO will normally perform the pricing on actions between \$100K and \$500K with the certified cost or pricing data. PMF will request field pricing assistance from DCAA and upon receipt of the reports will forward them to the buyer. The field pricing support may be waived for a buy action if there was an audit performed recently. The buyer will analyze the field pricing report, prepare the AF objective, conduct negotiations and prepare the PNM.

Pricing assistance is required for all noncompetitive actions over \$500K and is initiated with issuance of AFLC Forms 129 and 224. Upon the receipt of the proposal, the pricing office and the buyer evaluate the proposal and request a field pricing support report from the CAO and DCAA. The pricing office performs a cost or price analysis. If there is disagreement between the pricing office and the audit recommendation which exceeds 5% of questioned cost and these costs exceed \$500K, the Designated Independent Senior Acquisition

Official (DISAO) will make recommendations to resolve the disagreement. After the AF price objective is prepared, the price analyst will assist the buyer/PCO in the conduct of the negotiations. Negotiations are usually conducted over the phone unless the complexity of the acquisition requires Temporary Duty (TDY) travel to the contractor facility. After the negotiations are completed, the contractor is required to submit a Certificate of Current Cost and Pricing Data. This may be supplied immediately or it can take up to a month depending on the contractor. A problem that can arise is that the contractor's costs may have changed and this will result in reopening the negotiations or the contractor having to update the proposal. Usually the price analyst starts preparing the Price Negotiation Memorandum (PNM) while awaiting the Certificate.

One of the problems facing the pricing divisions is the backlog the price analyst encounters due to working on several cases at the same time. The buyer may inform PMF that pricing assistance will be needed but nothing can be done until the receipt of the proposal. A major problem outside the PM control is that the price analyst often has to wait for the audit report to come in from DCAA. Response time by DCAA often exceeds the time allowed (see paragraph 5.2.1).

5.1.5 PMD

Manufacturing and Contract Management Division (PMD) function assists in the preaward and postaward contractual phase. PMD is also responsible for managing product quality assurance for Central Buy Actions. The Contract Management Branch provides controls for the surveillance over production performance and delivery status of awarded contracts. The Planning and Technical Support Branch supports the purchasing effort by evaluating the contractor's performance. The Contractor Responsibility Review Program (CRRP) maintains a file for each contractor which shows the status of their contract performance. If the contractor is not on file, the buyer may call DCASMA or DCAS to obtain any information available. The information summarized on the CRRP is based on input from PMDO, CAO, Small Business, CR and the

contractor. PMDM may recommend award, no award or that a Preaward Survey be requested. PMDM, being the office of primary responsibility for Preaward Survey (PAS), sends a letter to the cognizant CAO requesting that a PAS be performed.

5.1.6 PMM

Manufacturing Management Division was established in Oct 85 at the Sacramento Air Logistics Center, McCellan AFB. Sacramento ALC is a test center. PMM developed by dividing the responsibility of PMD. Buyers and PCO's at SMALC are responsible for following up on the status of the contracts they awarded. The remainder of the functions performed by PMD are accomplished by PMM. The PMM Division supports the buyers by accumulating and updating performance data for Contractor Responsibility Review Files and monitors Preaward surveys. The buyers have the capability of using J018 to make inquiries to the Contractor Responsibility Review Program (CRRP). If sufficient information is not available in the J018, the buyer fills out a form and forwards it to PMM. PMM personnel will then contact the Contract Administration Office (CAO) to obtain the needed information. This process may take up to two days. PMM also maintains a Joint Consolidated List of Debarred, Ineligible and Suspended contractors. Other responsibilities of PMM include maintaining "unsolicited proposals" submitted by contractor, being aware of quality assurance matters and managing Government Furnished Property (GFP).

Buyers are responsible for postaward surveillance relating to contracts they awarded. Buyers also have the responsibility of sending letters to DCAS requesting Preaward Surveys. If a Certificate of Competency (COC) is required, the buyer will forward the necessary information to BC who will then review it for accuracy before submitting it to SBA regional office.

5.1.7 ACPS

The Automated Contract Preparation System (ACPS) is a computer system used for the preparation of contracting documents in AFLC. When a contractual document arrives at ACPS, a clerk logs it in and checks the document for accuracy. The data to create the solicitation document is taken from AFLC Form 392 or 394 prepared by the buyer and combined with data from the J041 system. The approximate time to complete this entry is, according to the operators interviewed, 2 hours. The times it takes for the other documents are the following: Purchase Order: 1 hour and letter contract 1/2 hour. These are typically printed in draft form for review by the buyer. The buyer may take 3 days to correct and return the document for printing the final product.

ACPS also does word processing for the buying divisions. Plain text messages are also created; for example, synopsis and request for Best and Final Offer (BAFO). From our discussions and observation, it appears that documents are clearing ACPS normally in about 3-5 days. The actual time it takes the documents to go to distribution depends on whether the buyer reviews the document and whether revision is required. The computer does have down time but this does not appear to be affecting the cycle time.

5.2 External Influences

A number of external factors influence the ability of the AFLC contracting personnel to meet the cycle standards. These factors are beyond the ability of individual buyers to control. A number of these factors are discussed in the paragraphs below.

5.2.1 Field Pricing

Field Pricing assistance entails the evaluation of the contractor's pricing proposal. The individuals who perform the

evaluation may include plant representatives, administrative contracting officers (ACO), contract auditors, and on-site price analysts. DCAA performs all contract auditing. The CAO performs technical and pricing reviews and issues the Technical Analysis of Cost Proposal (TACP) reports. The TACP report evaluates factors that affect cost such as material and labor.

The field reports have exceeded an average of 82 days command-wide when the standard allowed is 45 days. A second problem that often results from the delay is that contractors update their proposals during the evaluation. This update usually does not require another audit, but requires referral to the audit agency for their evaluation. The information shown in figure 5-2 was provided by HQ AFLC/PMX showing the actual flow times being experienced by the ALC's.

	OC	OO	SM	WR	WPCC	SA
Audit	69.5	47	63	N/A	42	N/A
CAO	84.3	68	88	83	57	N/A

Figure 5-2 Average Audit Flow Time (in days)

5.2.2 PAS

Preaward Surveys (PAS) are performed when PMDM does not have sufficient information concerning the responsibility of a particular contractor who is the low bidder. PMDM is the office of primary responsibility for requesting and following up on PAS. The decision to request the PAS is made by the buyer/PCO. PAS are generally not accomplished on PR's less than \$25K because of the high cost. If a PAS is requested on a proposal under \$500K, branch chief approval is generally required. PAS are taking an average of 25-30 days. A representative from PMDM may be called upon to assist the Contract Administration Office (CAO) if the technical support is essential. If the PAS is affirmative, the buyer will proceed and make the award. If PAS is negative, the buyer will go to SBA regional office to request a Certificate of Competency. This process takes approximately 15-20

days. A buyer must refer to SBA to obtain a COC on any small business determined to be nonresponsible by any criteria. If the COC is issued, the buyer will award the contract. If the COC is denied, the buyer will go to the next low bidder to determine whether that contractor is responsible or not. This might result in another PAS. The buyer, in some cases, may perform two or three PAS due to the emphasis on increasing competition which is introducing a greater number of businesses new to AFLC contracting as bidders on AFLC requirements.

5.2.3 ACD

When the funds of a purchase request are "Initiated Only" or "Initiated and Committed" but the funds required exceed the PR estimated total price, the funds must be certified. The buyer uses AFLC Form 49 Administrative Commitment Document (ACD). The form is first forwarded to MMIMR. They are responsible for verifying the accuracy of the form and administering the funds. After coordination, the form is forwarded to ACFSCA. They certify the funds. The form is then returned to the buyer.

ACFSCA and MMIMR have a five day suspense to return the ACD. If the ACD is not back within that time, the buyer is allowed to use Exception Reason Code (ERC) 65 to "stop the clock". The buyer will send the PR package to PMXO where it is held until the receipt of the ACD. At the receipt of the ACD, award completion actions are taken and a new date is established in PM. This may impact cycles if buyers do not use ERC 65 especially if the requirement is for Foreign Military Sales (FMS). Funds approval for FMS will always take approximately 45 days. In addition, if the negotiated price exceeds the PR by more than 10%, concurrence must be obtained from the originating country which may involve months.

5.2.4 CRS

The Source Development Office (CRS) is under the management of Competition Advocate. The primary responsibility of CRS is source

approval. Approximately 10% of the source approval activity stems from PM requests which may be a result of receiving a bid from an unapproved source. As the request for source approval is logged in at CRS, a nontechnical review is performed which takes 1-2 days. After CRS's review, the request package is forwarded to a cognizant engineer in Material Management. The goal is to have the technical review returned to CRS within 15 days. CRS will conduct a final review and return the package to PM. Another time CRS may impact the standards is when the buyer needs additional sources due to receiving no bids on a solicitation. In this case, CRS will search out and identify sources which have demonstrated capability in the type of manufacturing required of the specific part.

5.2.5 CRE

The Engineering Data Management Division (CRE) responsibilities include preparing AFLC Form 1, preparing engineering data bid sets, reviewing justification and approvals and performing technical reviews on source approvals not stemming from PM. The only impacts on cycle standards CRE has is when the PR package requires rescreening (this may take 30-90 days) or when they are involved with MM in responding to allegations of problems with the data packages provided with the solicitation.

5.2.6 CRV

The Analysis and Review Division (CRV) of the Competition Advocate compiles information from other divisions of CR and establishes target prices for individual items. CRV also performs price analyses to assist the buyer. First Look is a price analysis done when there is no price history on the Procurement History Record (PHR). First Look (Level I) involves ordering data from the Directorate of Material Management (MM) engineering which usually takes 2-20 days. After the data is received, the cost estimate is developed. The price analyst computes overhead and profit according to current rates provided by the CAO. The second evaluation (Level

II) done by CRV reevaluates the estimates of the First Look. The buyer requests a Second Look if there are problems in the negotiation. Resolution cell is the third review which CRV is involved in. A Resolution cell is convened when the negotiated price between the contractor and buyer is not within 25% of the CRV estimated cost. The members of the Resolution cell are the PCO, buyer, item manager, CRV personnel and other ALC personnel as needed. The decision addressed in the Resolution cell is whether or not to award the contract. Usually the decision to award is because the cost impact of delay in award is too significant. If the cell decides not to award, they consider other options such as other sources or reverse engineering. Resolution cell takes approximately 5-10 days.

Tinker AFB at Oklahoma City has started a study on Feb 4, 1987 for 9 months. The CRV function will be accomplished in the pricing division and will become PMFV. The function will essentially be the same.

5.2.7 JA

The Judge Advocate General (JA) Office reviews, advises and coordinates on the contract awards in central and base procurement. Every contract action from Central procurement over \$100K requires JA coordination. In some instances the attorney may defer contract award due to a legal problem. In this instance, it comes back to the JA office after the problem is corrected. Contract Reviews are divided according to routine or priority basis. Requests from buyers to answer questions are called opinions. These questions may be administrative and can occur at any point in the processing of contract award. Opinions are also on routine or priority basis. Opinions may take 6 to 8 days. If this problem occurs, the delay can be over a week. If there are no problems with coordination, the JA Office claims there is a 1-5 day turnaround depending on ALC.

Another problem in which the JA office plays a major role is a protest. If it is a GAO protest, the JA office receives a copy and

reviews the protest for strengths and weaknesses. The next step is to analyze the facts and conduct legal research. Then a legal memorandum of law is written defending the government position. If the government is at fault, then the protest is sustained at the local level. If the protest is not sustained, the memorandum goes back to the buyer who then forwards it to AFLC/PMPL and RDCX for their review. Then it is forwarded to GAO where the decision is made for or against the government.

5.2.8 SBA

Small Business Administration (SBA) has a representative assigned at each of the ALC's. SBA has two functions: technical and administrative. Each PR package that may be appropriate for small business but is not set-aside must be coordinated with SBA. The majority of the time, the PR package arrives at the buyer's desk with BC and SBA coordination. If the coordination of the two offices is not on the package, the buyer sends AF Form 3055 to BC. Their turnaround time is approximately 24 hours. SBA reviews the PR for applicability of small business set-aside and gives the set-aside decision. SBA may question work specifications, delivery schedules and Acquisition Method Code (AMC) coding. If a technical review is required, it is referred to the technical specialist in the SBA office. After the review has been completed, the PR Package is returned to the buyer. This process takes approximately 2-3 days. To expedite matters, the buyer may walk through the coordination.

SBA also reviews subcontracting plans which are mandatory for all proposals over \$500,000. Different SBA offices may utilize different procedures for handling the reviews. For instance, at OC-ALC the buyers leave the plan at the SBA Office and they are reviewed twice a week.

5.2.9 BC

The ALC Small and Disadvantaged Business office (BC) coordinates on all non-small business set-aside actions over \$5K and all small

business set-asides over \$25K. The coordination may be obtained when the PR package is distributed by PR/MIPR control or after the package is in the buyer's hands. There are three reviews that are performed in BC. The first review is the review of AF Form 3055 to determine whether a small business set-aside is applicable to the PR. BC coordination is required despite the decision reached. The second review they perform is Subcontracting Plan Review. As the buyer is obtaining approval from BC, she/he is simultaneously obtaining coordination from SBA. The average turnaround for these reviews are approximately 3 days.

The third review performed by BC is 8(a) set-aside. This review starts during the initial Form 3055 review. At this time, a requirement is matched to an existing 8(a) source. BC then sends a letter to SBA to get their response. After SBA concurrence has been obtained, the PR is returned to the buyer. This process takes approximately 18 days.

5.3 Variations at ALC's

There are a number of areas in which individual ALC's have structured their procedures in a nonstandard manner to obtain processing improvements. Other variations have developed from unique ALC situations or a perception of unique ALC situations. The paragraphs which follow describe some of the variations.

5.3.1. AFLC Form 710 Processing

San Antonio - ALC has an AFLC Form 710 Review Committee which includes representatives from MMM, CR, and an Equipment Specialist (MMMT). The main objective of this committee is to solve all problems that the buyer may have at the AFLC Form 710 stage and prevent it from being worked through an AFLC Form 709. From the time the buyer takes AFLC Form 710 to the committee, she/he has five days suspense before returning the PR for rework. Many buyers will keep the PR as long as possible waiting for the problem to be resolved before returning the

PR. Use of the technique should, on the average, reduce the time required for correcting problems with the PR Package.

Sacramento - ALC has established CRE-1 which includes representatives from MMTS and CRE. They handle all PR returns. A buyer fills out AFLC Form 709 and this team will work the problem either themselves or with the item manager. The buyer has a five day suspense time before she/he is allowed to return the PR. They may decide to hold it as long as possible. At the time it is decided to return the PR, the buyer obtains coordination from section, branch, and division chiefs and CRE-1.

5.3.2 Contractor Responsibility Reviews

At the ALC's, there are variations as to the time it takes to determine contractor responsibility. At Warner Robins ALC, the turn-around for receiving contractor responsibility information is immediate. The buyer calls PMDM personnel and the response is provided immediately. There is one person performing this function in PMDM. At San Antonio ALC, the buyer fills out the top part of a locally designed form and forwards it to PMDM through the base mail system. The PMDM representative supplies the needed information and returns the form to the buyer. This process may take up to five days. At Sacramento and Ogden ALC, the buyer uses the Contractor Responsibility Review Program (CRRP) file in the J018 system to extract the information. The buyer still completes a form and forwards it to PMDM/PMM personnel. If they have the available information, they will input the data into J018.

PMDM representatives held a meeting in Ogden, Utah during the week of Feb 23rd concerning the automation of Contractor Responsibility Review Program. Using special forms, the buyer will request contractor information from the J018. If the information is positive and award is recommended, the response is output immediately. If there is a problem with the contractor, the output may take a few days depending on the problem. This automation will

require additional equipment which will take some time. The ALC's have decided to continue their procedures until automation is implemented.

5.3.3 Contractor Responsibility Determination

According to FAR 9.105-2, the Contracting Officer makes and signs the determination of nonresponsibility. In Sacramento, the determination is coordinated up to division chief. In Oklahoma City, the determination is coordinated through section chief, branch chief and PMC. This may cause a bottleneck due to basket time, workload and transfer time.

5.3.4 Advance Synopsis Procedures

Advance Synopsis Procedures vary at each of the ALC's. In San Antonio, the following are forwarded to the advance synopsis team on the first day of the Material Management coordination cycle: advance copy of the PR, screening analysis sheet (form 761), and multiyear requirements. This package is sent to the specific branches. A 4-hour suspense is placed for buyer assignment and small business coordination. This procedure has improved considerably and according to the supervisor of advance synopsis, the buyers are saving 19 days. There is no data available at this point as to how many PR's go directly to the branch. A log of PR's going directly to the buyer is now being kept.

In Warner Robins, the PR's go to the advance synopsis team at which point BC coordination is obtained prior to synopsising. The major problem encountered is that there has not been a sufficient time between the advance copy of the PR and the original PR arriving in PM. The Advance Synopsis Team performed a study which showed approximately 75% of the PR's forwarded to the buyers had time remaining before the synopsis period ended. No specific numbers were available on how much time the buyers were saving.

Another problem Warner Robins has been experiencing is that all PR's that required a J&A have been going directly to the buyers. Buyers have also been obtaining BC coordination and synopsisizing the requirements. According to PMXO personnel, new procedures will be implemented prior to June. These procedures require advanced PR's with J&A to be sent to the Advance Synopsis Team. After obtaining BC coordination, the requirement will be synopsisized and the advance copy of the PR will be forwarded to the buyer. The buyer will then complete Part II of the J&A and obtain MM coordination before the original PR is released from MM.

In Oklahoma City, the Advance Synopsis Team is receiving all PR's over \$5,000 except those coded 1G and 2G. The initial PR is accompanied by AFLC Form 761. The team is responsible for synopsisizing after BC coordination prior to forwarding it to PR/MIPR control. There the synopsis is attached to the original PR and forwarded to the buying branch. According to the personnel from Advance Synopsis team, presently 80% of PR's are being advance synopsisized and 3 to 5 days are being saved.

In Sacramento, automated synopsis is performed by ACPS and the process is divided to go through two channels. All PR's applicable for synopsis in the JO23 system are set aside each morning. Manual PR's are input by ACPS clerks into MV8000 disk file. At 3:00 each day, they are put into the TWX program and sent to Commerce Business Daily by AUTODIN. BC coordination is obtained by the buyers. The aim through these procedures is to save buyers 11 days.

In Ogden, PR monitor forwards the PR to PR/MIPR control. The PR is sent to PMXD where the purchase history request (PHR) is extracted. The PR and PHR are sent for BC coordination prior to being synopsisized. PR/MIPR control receives the PR and assembles the official PR package before sending it back to PMXD. The range of days being saved by the buyers is 9-16 days according to the information obtained from PMX at Hill Air Force Base.

6 PROBLEMS IMPACTING CYCLE PERFORMANCE

A number of problems impacting cycle performance were identified during the course of this research effort. Many of them have limited impact on the overall Command processing time due to their low frequency of occurrence or minimal flow time impact. There were a set of problems which had relatively high frequency of occurrence and/or significant flow time impact. These problems are described in the paragraphs which follow.

6.1 Data Problems

A problem impacting cycle performance concerns the competitive data packages that are forwarded to the contractor. This problem usually does not appear until the solicitation is on the street and contractor needs clarifications on the data packages. The need for the clarifications may be driven by illegible drawings, missing data cards or inadequate specifications. If these problems are initially discovered by the buyer prior to solicitation, they may be corrected by a telephone conversation between the buyer and item manager. If they are not resolved at that point, the buyer will prepare AFLC Form 710 (709 at SM) and forward it to the item manager. At that time, the item manager has a five day suspense to return the form or the buyer has the option to return the PR package for rework. If one of the solicited contractors alleges a data problem, which is confirmed, it may require an amendment that would extend the solicitation due date to allow time for corrected data to be provided and for bid preparation.

This problem is reflected in data collected from 710/709 Review Committee at San Antonio. Figure 6-1 below shows the number of PR's reviewed, sent to MM/CR, returned to PM and the percentage of 709's issued.

	<u>Reviewed</u>	<u>Sent to MM/CR</u>	<u>Returned to PM</u>	<u>709 Issued</u>
OCT	599	493	106	49.3%
NOV	535	465	70	69%
DEC	909	791	118	51.9%
JAN	793	643	150	39.3%

Figure 6-1 AFLC Form 709/710 Processing at SAALC

<u>RANGE(DAYS)</u>	<u>NO OF OCC.</u>
0-5	0
5-10	2
10-15	4
15-20	4
20-25	4
25-30	3
30-35	7
35-40	2
40-45	6
45-50	2
50-55	1
55-60	3
60-65	2
65-70	0
70-75	0
75-80	3
80-85	1
85-90	0
90-95	0
95-100	1
100-105	1
105-110	1
110-115	1
115-120	0
120-125	0
125-130	0
130-135	0
135-140	1

FIGURE 6-2: Days from solicitation to receipt of proposal

6.2 Noncompetitive Proposals

A major problem impacting cycle time is contractor response to solicitation documents in any noncompetitive cycle. The standard allows 30 days for a contractor to respond. A number of large contractors regularly take 45 - 90 days or more to submit non-

competitive proposals. A buyer may consecutively follow up at section, branch and division level, but the contractor's response normally cannot be expedited. Figure 6-2 shows the response times for a sample of 49 noncompetitive contracts. The contracts observed were from WRALC and SAALC. According to buyers interviewed, smaller contractors will generally submit their proposal close to 30 days. If a solicitation is submitted to a foreign contractor, a buyer/PCO is required to allow the solicitation to remain open for 45 days. Response time for submitting Certificate of Current Cost and Pricing Data also depends on the particular contractor. The contractor may provide it immediately or take up to one month to provide the Certificate. This time is not reflected in the standard days, yet it is outside the buyer's control.

6.3 Vendor Breakout

Another delay that may be incurred involves vendor breakout. In response to a sole source solicitation, the prime contractor may take 30 -40 days to inform the buyer that the item is 100% subcontracted and to identify the actual manufacturer. The buyer then solicits the vendor leaving the solicitation open an additional 21 - 30 days.

Increasing competition has also impacted the processing time due to the number of smaller, previously unknown business that are submitting quotes. According to the F-15 branches at WRALC, they are receiving quotes from small firms with whom they have had no experience. These circumstances often require verification of bids due to disparity in prices quoted compared to the price history. In addition, these firms are not in the Contractor Responsibility Review Program files. This situation may require referring the request for information on responsibility to CRS or the CAO.

6.4 Delay of Audit Reports

An external problem that impacts all noncompetitive actions over \$100K is the response time for audits and field reports from DCAA.

The command average on DCAA response to audit reports is approximately 82 days. This delay often leads to another problem. A situation that may result would be the contractor updating their proposal after the audit and analysis have been submitted to PMF. When proposals are revised, the revision must be submitted to DCAA to determine if there is any impact on the audit recommendation. The magnitude of this variable can impact all noncompetitive cycle 6 actions pushing them over the standard of 165 days.

6.5 Work Force Experience Level

The ability of the AFLC buying divisions to complete actions within the existing cycle standards has also been hampered by the experience level of the contracting work force. As a result of the recommendations of the AF Management Analysis Group (AFMAG) on Spare Parts Acquisition, a major expansion of the contracting work force was accomplished under Project Pacer Produce. This increase was accomplished in four phases. The personnel additions are shown in Figure 6-3. The influx of these large groups of new personnel had two significant impacts.

<u>Date</u>	<u>Nr Accessions</u>
Dec 83	306
Oct 84	431
Sep 85	196
Aug 86	<u>136</u>
TOTAL	1069

Figure 6-3 Pacer Produce Accessions

The first impact was that the performance of these personnel was below that of a fully qualified buyer since they, in the main, had no previous government contracting experience. Consequently, they did not have a general knowledge base to draw on and had to seek guidance or research many of the actions which a qualified buyer accomplishes

almost instinctively. The second impact resulted from the need to provide On-the-Job Training (OJT) to the new personnel. This OJT could only be provided by the understaffed buyers and PCO's reducing the time available to process the contract actions for which they were responsible. Since the majority of the Pacer Produce personnel should be reaching a relatively qualified status, some improvement in cycle time performance should result.

6.6 ACPS.

An internal problem impacting cycle performance is the time ACPS takes to process solicitation and award documents. After the request form for the document is logged in, there is a prereview done. The next step is typing and formatting from the ACPS worksheet. The formatting may take 10 minutes to 8 hours or more depending upon the line complexity. There are clerks assigned to perform the post-review function. This usually results in the documents being sent back for corrections. The documents are then sent to reproduction before being returned to the buyer. ACPS turnaround is supposed to be one day. According to interviews with PMX personnel, ACPS has required on the average 5 or more days to prepare required documents.

6.7 Management of Cycle Performance

There is a generally held perception within the buying organization that the existing standards are unrealistic and unattainable. In addition, many of the personnel expressed the opinion that emphasis on meeting these standards resulted in insufficient attention to the quality of the acquisition and the reasonableness of price. While many buyers and supervisors regularly review cycle performance, they do not appear to be motivated to press for compliance since they see no probability of success. In most cases, acquisitions are reviewed only when they have already exceeded the standard and the efforts are directed at minimizing the overrun. If the operating personnel believe that the standards are reasonable

and attainable, it is reasonable to assume that their efforts will be more goal directed and applied earlier in the process thus correcting problems in a more timely manner.

7 RECOMMENDATIONS

This section includes a number of recommendations which resulted from our research effort. They cover a broad range of issues.

1. Buyers should be informed of and should utilize the various situations that allow for changing cycles. Two examples of these situations are a change to require a first article or allowing purchase of a surplus item.
2. For cycles 7 and 9, buyers should be required to go to CRV as soon as possible instead of waiting for contractor's response. Government estimates may already be established.
3. Section chiefs should designate a backup person to take the responsibility to assign PR's when they are TDY, on sick leave, or otherwise not available so that basket time is brought to a minimum.
4. Requirements that are being acquired competitively for the first time should be put in cycles that allow more days (Cycle 7 instead of 4, 9 instead of 5). This would allow for the probability of receiving no response or for problems in determining contractor responsibility. We were unable to obtain a measure of the frequency of occurrence of these events on the first time competitive acquisitions, but our interviews with a number of buyers indicated that these are common problems.
5. Determination of nonresponsibility should not be elevated above the PCO.
6. On competitive, low dollar threshold buy actions, the buyers should not open bids submitted after the end date of solicitation and should open the bids on the date set forth.

7. Small Purchases under \$1000, Price Evaluation Code (N) should not be exclusively assigned to cycle 4. Cycle 4 assumes the action is competitive. Noncompetitive small purchase actions under \$1000 should be assigned to Cycle 7.

8. A team comprising of PM and MM personnel should be established in MM to review the quality of PR's before transmittal to PM. The individuals from PM should come from the buying divisions. This would ensure a more detailed review of the PR's which would result in decrease of the number of AFLC Form 710's issued along with the attendant delay in processing.

9. On noncompetitive actions over \$100K, Contracting Officers should request the contractors leave their quotes open 120 days due to the delays in receiving audit and analysis reports. This would decrease the occurrence of contractors updating and changing their proposals.

10. Buyers should only be reporting to their immediate supervisor, Section Chief, on overaged PR's. Buyers personally reporting to a number of levels of management is time-consuming and detracts from the time available for accomplishing buy actions.

11. Buyers should request cost breakdown on solicitations for non-competitive buy actions. This would reduce the time it is presently taking to determine the price fair and reasonable since this data is normally required to support the price or cost evaluation.

12. Accelerated PR procedures from San Antonio should be adopted by the other ALC's. The procedure results in saving the buyers 19 days and at the present appears to be the most efficient.

13. According to AFLC FAR SUP 17.9004 a(3), a 150 day standard is maintained for an Unpriced BOA Order Definitization (Cycle Y). In our research effort, we found the actions required to definitize Cycle Y were essentially the same as Letter Contract Definitization (Cycle W) and Contract Modification Definitization (Cycle X) which have a 180 day standard established. Therefore, 180 standard should be established for Cycle Y.

14. 8(a) Set-Aside Procurements that are initiated by the Small Business Administration(SBA) should be put in Cycle 7 or Cycle 9. These procurements would be complex because of the time required for SBA coordination and Hq approval of sources when necessary.

8 RECOMMENDED CYCLE STANDARDS

Figure 8-1 shows the command average for frequency of occurrence for the E841 Complexity Elements that are reflected in the cycle standards. These figures are an average of Sept 86 through Dec 86.

Figure 8-2 shows a breakdown of the activities required and recommended span times for each of the cycles studied. Some of the activities shown in figure 8-2 occur for each contract processed in the cycle. Other actions occur only on a subset of the contract actions. The span time impact of these actions was based on the flow time weighted by the probability of occurrence developed from analysis of E841 data. Each of the activities considered in developing the recommended cycle standard is described below.

8.1 Activity Description.

J041 coding is the time allowance for PR/MIPR's to be logged in to the J041 system. The time also includes transfer time from PMX0 where the PR is first stamped in PM to J041 clerk.

The time allowed for buyer assignment starts when the PR is forwarded by the J041 clerk to the specific buying branch. The branch chief will assign the PR to the appropriate section. Section chiefs will then assign the PR to a buyer. The time stops when the PR is received by the buyer.

An AFLC Form 710 Problem may arise when the PR package is initially reviewed by the buyer or after the solicitation has been released. Exception Reason Codes (ERC) 70-89 describe the events which can cause a delay in processing and would be handled through the AFLC Form 710 process. ERC's are listed in Attachment 1. The mean span time to resolve an AFLC Form 710 problem is estimated at seven days based on the fact that a five day suspense is given to item managers and two days should be allowed for transmittal.

COMMAND AVERAGE SEPT 86 - DEC 86

CYCLE/ACTIVITY	1	2	3	4	5	6	7	8	9
21-No Response Received	.04	.50	1	.244	.83	.841	.41	.80	.349
23-Rqmt Chg After Solicit.	.03	.49		.08	.20	.34	.08	.08	.656
40-Preaward Survey	.143	.25		.002	.041	.039	.0011		.013
42-Referral to SBA for COC	.014	.05		.0034	.0178	.01	.0012	.011	.0068
44-JA Review	.24	.56				1			
45-PMC Review	.18	.44	1			.208		1	
47-ALC/PM Approval	.04	.27				.096			
85-BAFO		.38		.0038	.048	.065	.037	.174	.026
92-ACD		.34		.22	.1756	.69	.21	.554	.254
59-1279 Issued						.018		1	
56-Quantity Discount	.12			.11	.17	.1074	.06	.10	.12
89 CR Level I & II Review				.027	.040		.118		.108
27-Tech Eval W/Neg				.029	.060	.110	.057	.270	.07
30 Tech Eval	.147	.04.2		.027	.07	.027	.02	.08	.015

Figure 8-1 Frequency of Occurrence for Complexity Elements

The span for reviewing and preparing the Request for Quotation (RFQ) or Request for Proposal (RFP) starts when the PR arrives at the buyer's desk. The buyer will review the PR and the attachments and assuming there are no problems, the buyer will fill out AFLC Form 392 or 394. This variation in span time for the cycles reflects the difference in complexity of the solicitation documents required for the different actions. PR not being worked on immediately due to buyer workload is also allowed in this span.

The span for synopsisizing is the average time utilized by the buyer out of the 21 days the synopsis requirement adds. The average time is established as a result of the variations in processing advance PR's at the different ALC's.

The span allowance for ACPS to process a solicitation document is based on an average time of all the ALC's. This time includes transmittal of the AFLC Form 392/394 from the buyer to ACPS. At ACPS there is a flow of events described in section 6.6. The time ends when the solicitation is either sent to the buyer or sent to distribution.

The time for receipt of a proposal is the time allowed for the contractor's proposal preparation and delivery. The time starts the day the solicitation is issued and the time ends on receipt of the proposal.

Request for field pricing assistance runs from the time the buyer receives the proposal until the time PMF forwards a letter of request to the DCAA. The span also includes the buyer transmitting AFLC Form 129 to PMM.

Field Pricing Report runs from the time the request is sent to DCAA until receipt of report. At the time of a request for field pricing support for source selection, the technical proposals are forwarded to the Technical Evaluation Team (TET). After the completion of the initial evaluation, the TET will have the ratings, narrative assessments, Deficiency Reports and Requests for Clarification. The time required for these efforts generally will overlap the wait for Field Pricing Report.

Negotiation time for noncompetitive actions over \$100K starts from the time the DCAA report is received. The time includes reviewing the report, fact-finding and negotiating between the Air Force team and the contractor. Negotiation time for noncompetitive action under \$100K is the time used in determining that the price is fair and reasonable. The effort may involve calling the contractor and requesting any cost information and the resultant conversations between buyer and contractor discussing price.

Evaluating and abstracting begins with the closing date of the solicitation. This time involves examining the bids for price and responsiveness. This review may result in the buyer asking for confirmation of price from all bidders or from the low bidder.

Certificate of current cost is required to be submitted from the contractor. The allowance for the span time starts with the completion of negotiations and ends with the receipt of the

certificate. The time it takes to submit the certificate depends on the contractor. Writing the Price Negotiation Memorandum generally will overlap the wait for the Certificate of Current Cost.

A buyer is required to determine whether the low bidder is responsible or not. The span time starts when the buyer contacts PMDM personnel to obtain information on the responsibility of the contractor. If no information is available within PM, the buyer may call the DCAS.

Obtaining the award document from ACPS involves essentially the same steps as requesting a solicitation. Therefore, there is an allowance of five days from the time the buyer requests the award document to the time it is received.

The span allowed for final distribution includes PMXOD mailing out the contract and sending the AFLC Form 453 to PMXDM. PMXDM is responsible for updating the J041 system.

A 30 day span allowed for no bids received starts at the end of the solicitation date. The buyers must find additional sources. She/he may refer to BC or CR to obtain additional names. The buyer solicits the additional sources leaving the solicitation open at least two weeks.

Complexity Element (23), Requirements Change After Solicitation, allows 21 day span time. The span time starts when the buyer receives the PR amendment. The delay impact depends on when the PR amendment is received. The buyer must notify the contractor of the requirement change. The time would end when the contractor notifies the buyer of whether any changes resulted in the proposal.

A 30 day span time is allowed for a preaward survey. The span time starts at the request for the PAS to the respective CAO by PMDM personnel. The time ends when the result is received by the buyer.

The span allowed for Certificate of Competency is 25 days which starts with the buyer sending a request for a COC to SBA regional office. The SBA office forwards the results which ends the time required for COC.

The span for JA approval is 3 days which allows for the time when a PM personnel submits the document for review at the JA office and picks it up as the reviews are finished. The 3 days is an average of the ALC's.

The span for PMC approval is 3 days which begins when the buyer takes a document for review to PMC and ends when the buyer picks up the document. The time it takes to review a document will depend on the complexity of the document and the order it came in. The 3 days is Command average.

The span allowance of 3 days for ALC/PM approval starts with the coordination from section chief to branch chief to division chief. After the document has been reviewed at these levels, it is forwarded to PM Director for coordination.

The 14 day allowance for AFLC/HQ approval starts when the solicitation or award document is forwarded to headquarters for approval where it is coordinated by PMC and PM. The time stops when the solicitation or document is brought back to the ALC. The assumption is that the document for review is handcarried to Hq AFLC.

After completion of negotiations, the buyer may go to the contractors and request a Best And Final Offer (BAFO). The time allowance starts with a request of a BAFO and the buyer usually gives the contractors two weeks to submit their BAFO.

Administrative Commitment Document (ACD) five day span is from the time the ACD is forwarded to MMIMR/ACFSC to the time it is sent back to the buyer.

The buyers allow approximately 45 days for contractors to submit their technical proposal on two-step acquisition. The time span begins with a letter request for the proposal and ends with the receipt of the proposal.

The span time of 45 days for evaluation of technical proposals allows for initial evaluation to determine which category the contractors fall into: acceptable, unacceptable, and susceptible to being made acceptable. The time period also allows for any answers or clarifications that the contractors may be required to submit. The time ends with final Evaluation which leads to determining the contractors that are solicited for a price proposal.

There is a three day span allowance for the issuance of a 1279 Report which is required for all procurement actions over \$3M. Once the announcement of the award to the Congressman has been made, the contracting officer is required to wait three days before contract is distributed.

If a quantity discount analysis is required, the buyer prepares AFLC Form 21 and forwards it to PMF to get computer analysis of various quantities. The computer analysis is then transferred to the item manager who selects the quantity desired to buy. The time allowance of 14 days is from the forwarding of AFLC Form 21 to PMF until the time IM sends the reply to the buyer.

The 14 day span allowance for CRV level I or II Review is a Command average. This time starts by sending a request for CRV estimate until the time estimate is sent to the buyer.

A 10 day span allowance is the average time it takes to perform a transportation evaluation. The time starts when the evaluation request is forwarded to Distribution and ends when the evaluation is returned to the buyer.

Technical Evaluation with negotiations may involve the item manager evaluating contractor's response to any of the following: part number change, material deviation or packaging requirements. The time allowance of 14 days starts when the evaluation request is sent to the item manager and ends when the buyer receives the response.

The 14 day span allowed for Modification Definitization document which is required on all definitizations starts after completion of negotiation and finishes before coordination begins. The document will provide final terms, conditions, delivery and price.

The span time of 14 days is estimated for execution of a Bilateral contract. This is the time it takes for the contracting officer to forward the contract to the contractor for his signature and for the contract to be sent back to the contracting officer.

The Complexity Element(64), greater than 25% increase in last year's price, requires the buyer to prepare the certification and have it coordinated by PMC before sending it to Hq AFLC/PMPF. This element was excluded when MTC revised the standards. The frequency of occurrence from the data collected was less than 1%.

ACTIVITIES	SPN	1 FRE	1 DYS	2 FRE	2 DYS	3 FRE	3 DYS	4 FRE	4 DYS	5 FRE	5 DYS	6 FRE	6 DYS
JO41 CODING			2		2				2		2		2
BUYER ASSIGNMENT			3		3				3		3		3
710 PROBLEMS	7	0.35	2		2				2		2		2
SYNOPSIS	10		10		10		10		10		10		10
REVIEW/PREPARE RFP			5		10		10		2		2		5
ACPS(SOLICIT)			5		5		5		5		5		5
RECEIPT OF PROP			30		30		45		30		30		30
REQ FIELD RPT	82						82						
FIELD PRICING RPT	7						7						
NEGOTIATION/PHN	35						35						
EVAL/ABST	7						7						
CERT OF CURR COST	14						14						
CONTR RESP DET	3						3						
ACPS(CAWARD DOC)	5						5						
FINAL DIST	2						2						
NO RESPONSE RECD	30							0.02	1	0.03	1		
RGMT CHNGE AFT SOL	21	0.03	1	0.49	10			0.08	2	0.2	4	0.34	7
PREAWARD SURVEY	30	0.14	4	0.25	8			0.002	0	0.41	1	0.039	1
REFERRAL FOR COC	25	0.01	0	0.05	1			0.003	0	0.02	1	0.01	0
JA APPROVAL	3	0.24	1	0.56	2								3
PMC APPROVAL	3	0.18	1	0.44	1							0.2	1
ALC/PH APPROVAL	3	0.04	0	0.27	1							0.096	0
HQ APPROVAL	14						14						
BAFO	14			0.38	5		14	0.004	0	0.05	1	0.07	1
ACD	5	0.08	0	0.34	2			0.22	1	0.18	1	0.69	3
TECH PROP SUB					45								
EVAL TECH PROP													
1279 ISSUED							3						
QUANT DISC	10	0.12	1					0.11	1	0.06	1	0.7	7
CRV LEVEL 1,2	14												
TECH EVAL W/NEG	14							0.029	0	0.06	1	0.11	2
TRANS EVAL	10	0.14	1.4	0.04	0	0.2	2	0.027	0	0.07	1	0.027	0
DEF OF MOD DOC													
BILATERAL													
RECOMMENDED STANDARDS		84		199		246		66		82		100	
CURRENT STANDARD		90		200		200		50		70		165	
CHANGE FACTOR		0.9		0.9		1.2		1.3		1.1		0.6	
CURRENT PERFORMANCE		105		245		173		91		129		220	

FIGURE 8-2 CYCLE STANDARDS

ACTIVITIES	7	8	9	J	H	X	Y	FRE	SNC
	FRE	DYS	FRE	DYS	FRE	DYS	FRE	DYS	DYS
JO41 CODING	2	2	2	2					2
BUYER ASSIGNMENT	3	3	3	3					3
710 PROBLEMS						3			3
SYNOPSIS	0.25	2	10						10
REVIEW/PREPARE RFP	2	14	2	2					5
ACPS(SOLICIT)	5	45	5	30					5
RECEIPT OF PROP	45		45						45
REQ FIELD RPT		0.4	33		7	7		7	7
FIELD PRICING RPT		0.4	2		82	82		82	82
NEGOTIATION/PNM		0.4	14		35	35		35	35
EVAL/ABST									
CERT OF CURR COST		0.4	6		14	14		14	14
CONTR RESP DET									
ACPS(AWARD DOC)	5	5	5	5					3
FINAL DIST	2	2	2	2					2
NO RESPONSE RECD	0.04		0.03						2
RGMT CHNGE AFT SOL	0.08		0.179						7
PREAWARD SURVEY	0.001	0.78	0.013					0.34	0.039
REFERRAL FOR COC	0.001		0.007					0.01	0.01
JA APPROVAL				3					0
PMC APPROVAL				3					3
ALC/PM APPROVAL				3				0.2	0.096
HQ APPROVAL				3					1
BAFO	0.004	0.17	0.03					0.07	0.69
ACD	0.21	0.55	0.25						3
TECH PROP SUB									
EVAL TECH PROP									
1279 ISSUED									
QUANT DISC	0.12	0.1	0.12					0.06	1
CRV LEVEL 1.2	0.12		0.1						
TECH EVAL W/NEG	0.057	0.27	0.07					0.11	2
TRANS EVAL	0.02	0.08	0.015					0.027	0
DEF OF MOD DOC									
BILATERAL									
				14				14	14
				14				14	14
RECOMMENDED STANDARDS	111	190	122	53	180	180	180	180	239
CURRENT STANDARD	80	180	95	30	180	180	180	150	165
CHANGE FACTOR	1.3	1.0	1.2	1.7	1	1	1.2	1.2	1.4
CURRENT PERFORMANCE	118	258	172	143	210	288	262	220	

FIGURE 8-2 (cont'd)

9 RECOMMENDED USE OF CYCLE STANDARDS

When a standard is established, it can serve as a basis for performance evaluation and management improvement. It is not necessary that the actual performance be near the standard when it is put into use. If the standard is realistic and aggressive management action is taken to identify and correct the causes of variation, the variance will continually reduce. Within the contracting function, the cycle standard can be used to significantly reduce the administrative lead time for acquiring the needed parts and services. In the application of the standards, there should be a significant difference at the Directorate level and at the individual buyer level.

9.1 Organizational Performance Measure

The revised cycle standards should be used as measure of performance of Contracting and Manufacturing Directorate (PM) at each Air Logistic Center (ALC). AFLC HQ needs to have realistic measures of ALC PM performance and effectiveness. While there are a number of reasons for the variation of standards at the ALC's, there has not been a focused effort to segregate the impact of each reason and define and implement corrective action. Management at PM level should define the internal and external factors contributing to variances. Within each set, internal and external, the specific factors should be identified. Figure 9-1 provides a preliminary list of internal impediments to meeting the cycle standard.

- Excessive basket time
- Unnecessary sequential processing
- Poor PR quality
- Negotiation delays
- Document processing time
- Work force training and OJT demand

Figure 9-1 Preliminary List of Internal Impediments

Our research indicated that each of these factors has contributed to the problem of cycle time performance. In addition, there were other specific elements in individual buys which impacted performance. There was, however, no overall assessment of the contribution of any specific factor to the overall problem. The result of this situation is that there is no basis to measure the effectiveness of corrective actions which are being initiated, both of AFLC and individual ALC level. Since the contribution of that factor is not clearly understood, it is extremely difficult to forecast the impact of the corrective action and then measure whether that improvement was attained. The same argument can be applied and the external factors which influence performance. A preliminary list of these factors is shown in figure 9-2. The factors shown in figure 9-2 are not susceptible to individual buyer resolution.

Audit/Field Pricing response time
Data problem resolution time
CRV response time
Contractor proposal response time
Preaward survey response
Source identification response

Figure 9-2 Preliminary List of External Impediments

Some require action internal to AFLC, but outside of the PM community. Others require action be taken outside the Command. In either case, identification of the magnitude of the problem and its impact on the PM mission are necessary prerequisites to effective action.

It is recommended that AFLC PM establish a program to identify and measure the impact of the internal and external factors which impact cycle performance. Based on this assessment, corrective actions can be initiated and their effectiveness can be measured. Only by aggressive implementation of such an approach can there be any assurance that the standard cycle times can be attained.

9.2 Buyer's Performance Measure

Evaluation of individual buyer performance is essential in buying divisions. One of the primary measures of buyer performance available is the flow time to process a buy action. Currently, each buyer is measured on the time to complete each buy. The basis for evaluation is the cycle standard for the type of action. When viewed at the individual action level, performance should be better than standard unless problems have been encountered. Where a problem has occurred, it will probably result in exceeding the standard. In addition, the number of days over standard will be significant. The data described in Table 9-1 above showed that the problems tend to be relatively infrequent but significant in terms of days impacted. The buyer can affect the time required to work some of these problems, but many of them are beyond the buyer's control.

To obtain a fair measure of buyer performance, it may be more appropriate to measure specific acquisitions against a weighted cycle standard. This weighted standard would include the days from the basic cycle standard, but would add allowances for the specific problems which were encountered on that specific acquisition. This weighted standard could be generated based on the identification of the complexity elements for the E841 system. Allowed days for each complexity element could be generated and the weighted standard and actual performance compared. This would provide a basis for performance review by the supervisor. In addition, the allowances from the system could be used by the buyers (and supervisors) as benchmarks during their processing. This would create a situation in which the buyer is being measured on how well he or she accomplished the actual buyer controlled work elements within the acquisition.

9.3 Use of Exception Reason Codes

The idea of Exception Reason Codes used as "clock stoppers" or time additives should be considered for those instances that are outside the buyer's control. "Clock Stoppers" should be used when the frequency of the problem elements are very small and as such make

minimum contribution to the standard yet their impact is significant. The following is a partial list of these elements: protests, no bid received, data package discrepancies, surplus item, mistake in bid, and requirements change requiring resolicitation. By stopping the accumulation of time against the acquisition processing standard, there is a recognition that the events are not within the control of PM and that their performance is not being measured accurately by including these time periods.

If such a system is adopted, it is important that a measure of the actual span time to process the acquisition be maintained. This figure, representing the actual administrative lead time to process contract actions needs to be used by MM in the requirements computations.

10 RECOMMENDATIONS FOR FUTURE RESEARCH

A number of questions arose during the course of this research effort which impact on ALC PM performance, but were beyond the scope of this task. A number of these questions or open areas are briefly discussed and some suggestions as to potentially valuable research efforts are presented.

10.1 Purchase Request Quality

There were a large number of buyers who suggested that excessive amounts of time were being expended working out problems with the basic Purchase Request (PR). The data presented in Section 6 of this report gave some measure of the problem, but its full impact is not known. As problems are identified through the AFLC Form 709/710 process or through other evaluations, the detailed structure of the problem should be described and quantified. On the major elements that have been identified, corrective action can be initiated. This action could include training programs, revision to policies or operating procedures or changes in the review and approval process for PR's.

10.2 Buyer Training

As data becomes available on the causes of delays in the processing of contract actions, those delays attributable to buyer activity should be evaluated. The purpose of the evaluation is to determine where shortcomings in buyer skill or knowledge contribute to excessive flow times. Where these shortcomings are identified, focused formal classroom or OJT programs should be developed to remedy them.

10.3 Impact of Complexity Elements

Initial estimates of the flow time impact of the complexity elements of the E841 system were developed under this research task.

These estimates were developed based on observation, analysis and discussion with AFLC contracting personnel. To increase the validity of the standards, more accurate estimates need to be developed. Part of this need could be met by gathering data, where feasible, on the impacts of the elements. This could be accomplished through logs (possibly computer based) of the events and their impact. This data could then serve as the basis for refined estimates. Another potential approach would be to utilize the data in the E841 system coupled with the J041 span time data. Combining these data sets would allow for developing estimates of the impact of the complexity elements by utilizing regression analysis.

CIRCLE CODE INDICATING PRIMARY REASON FOR RETURN

- 70. Inadequate Item Description
- 71. Deficient or missing specifications or drawings
- 72. Erroneous or missing entries on PR/MIPR
- 73. Lacks required attachments other than specifications or drawings
- 74. Lacks required justification statement (urgent or sole/selected source)
- 75. Stock balance incorrect
- 76. Item already on order
- 77. Item available in stock
- 78. Substitute item available in stock
- 79. Change in consumption rate
- 80. Incorrect/obsolete item on PR/MIPR
- 81. Program Change
- 82. Funds not available
- 83. Recommended source(s) state part number is incorrect/obsolete/unidentified
- 84. Recommended source(s) offer alternative proposal or superseding part number
- 85. AFR 57-6 screening/rescreening required
- 86. New source/unsolicited proposal requires technical evaluation
- 87. No available sources/no solicitation response
- 88. Other (define in remarks)
- 89. To accommodate correction of D/MM data in J041

SUGGESTED CHANGES TO AFLC REGULATION 70-11

AFLCR 70-11 Contracting Information Processing was reviewed in conjunction with this research effort. Only one major change is suggested. AFLCR 70-11 establishes the use of the various processing milestone (MS) cards as mandatory and optional. In most cases, the ALC has not elected to input the optional MS cards. As a result, the actual flow times are difficult to decompose into a number of processing spans to isolate the source of delays. This difficulty in isolation leads to greatly reducing the ability to identify significant causes of the processing delays. It is recommended that use of all MS cards be made mandatory until sufficient data has been accumulated to identify problem causes, initiate corrective action and observe that these corrective actions have accomplished their intended purpose.