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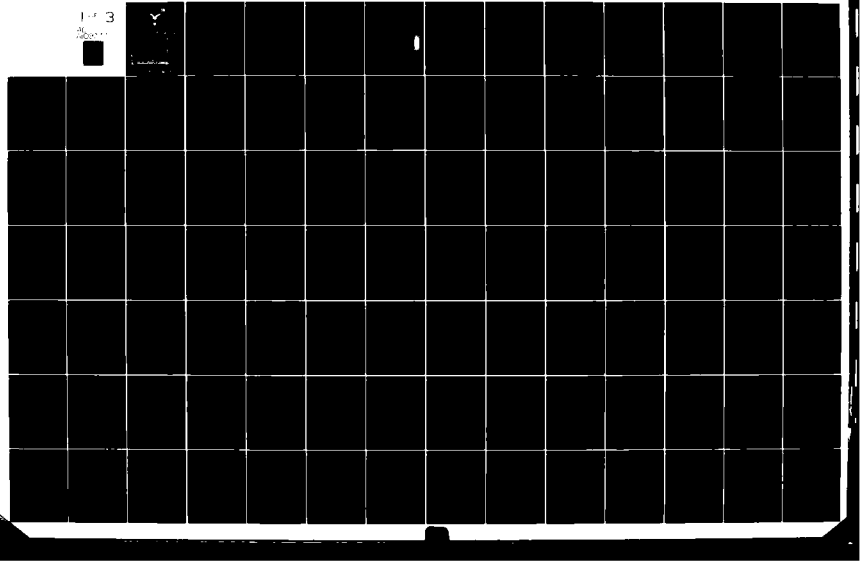

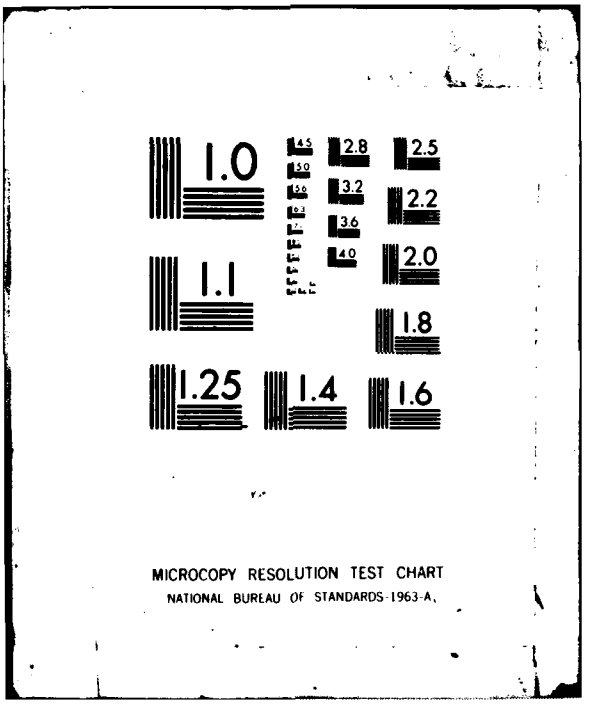
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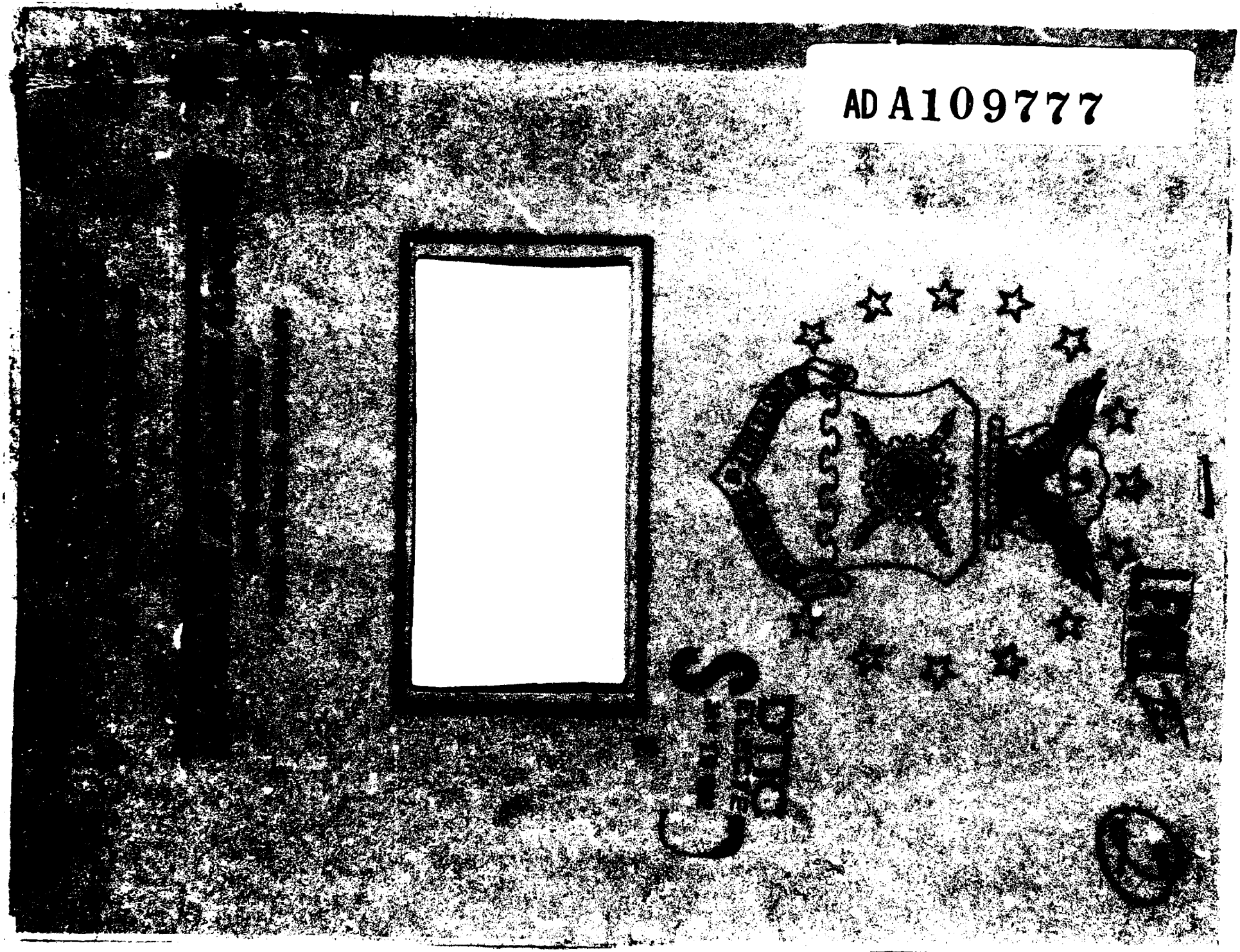

LEVEL II

A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION IN SUPPORT OF NEW WEAPONS SYSTEMS INITIAL BEDDOWNS

Kevin P. Hansen, Captain, USAF

LSSR 57-81

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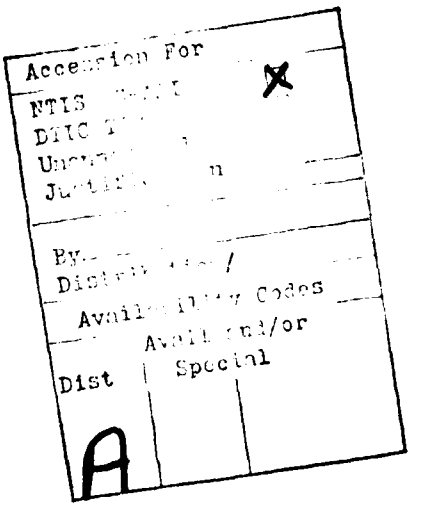

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This research effort investigated the interrelationships between the weapons system acquisition process and the facilities acquisition process. Independent PERT networks were developed for each acquisition process and a probability distribution was determined for each process. Comparison of the probability distributions showed that the facilities acquisition process could be expected to take approximately 13 months longer to reach an initial operational capability than the weapons system acquisition process when both are measured from the start of full-scale development for the weapons system being supported. The two independent PERT networks were then integrated into a single network which was analyzed to determine ways to compress the facilities acquisition process to meet the same initial operational capability as the weapons system acquisition process. Various alternatives to allow compression of the facilities acquisition process were examined, and a proposal to restructure the interface activity "tie-in" points between the two acquisition process was developed.

LSSR 57-81

A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION IN SUPPORT OF NEW WEAPONS SYSTEMS INITIAL BEDDOWNS

A Thesis

Presented to the Faculty of the School of Systems and Logistics

of the Air Force Institute of Technology

Air University

In Partial Fulfillment of the Requirement for the

Degree of Master of Science in Engineering Management

By

Kevin P. Hansen, BS
Captain, USAF

September 1981

This thesis, written by

Captain Kevin P. Hansen

has been accepted by the undersigned on behalf of the faculty of the School of Systems and Logistics in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN ENGINEERING MANAGEMENT

DATE: 30 September 1981

Edward J. Dunn Jr.

COMMITTEE CHAIRMAN

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CHAPTER 1

INTRODUCTION

Weapons system development and acquisition in the United States has undergone many different strategies throughout the years, but it wasn't until David Packard became Deputy Secretary of Defense that what might be called a balanced approach involving the Office of the Secretary of Defense (OSD) and the individual services evolved for weapons system development and procurement (20:4). The Packard legacy involves services' control of individual systems development, while OSD maintains overall control by reviewing and controlling further developments of individual weapons systems at specific phase points.

Another legacy of the Packard era is the increased use of hardware prototyping in weapons system development. Prototyping fell into disuse during the McNamara years in favor of total package procurement (TPP), wherein engineering studies and systems analyses were used to evaluate weapons system proposals and to award production contracts based on these paper studies. The TPP concept has evolved in an effort to reduce the costs and time for development of new weapons systems as a result of the rapidly escalating costs associated with these systems. It was thought that this "would allow the government greater cost control during all phases with a minimum of

government examination of the contractor's cost data [20:3]."

The Packard philosophy of a return to prototyping overturned the TPP concept in favor of hardware prototyping so that actual hardware could be evaluated. Prototyping offered several advantages over TPP, including "providing a hedge against strategic uncertainty, . . a hedge against technological uncertainty, . . and a hedge against cost uncertainty [16:15-16]." In the words of former Secretary of the Air Force, John L. McLucas:

> Although prototypes are costly, looking back at previous programs one can see instances where the total cost could have been less had prototypes been used. Essentially, a prototype is insurance. It insures us that our ideas will work, and that we will not be forced to make major changes late in the development or during production when costs for changes are high. Prototyping is investment in knowledge. We believe that the cost of acquiring that knowledge is frequently more than offset by the consequent reduction of later risks [16:17].

Still another advantage of prototyping is that competition can be maintained for longer periods in the acquisition cycle, which encourages higher quality products. Additionally, there is a much better data base for a development decision if the design approaches are translated into hardware (8:32).

Despite these advantages, there are some disadvantages attributed to using prototype development, the same disadvantages that lead to the introduction of the TPP strategy for systems acquisitions. These disadvantages can be consolidated into two main areas: increased cost and a longer development time. But a 1963 Rand report found no statistical support

that development programs involving large initial commitments cost less than prototype programs, nor was there statistical support for the claim that prototyping increased development time (12:v). The conclusions found in the 1963 Rand report were further confirmed with a 1980 Rand report that reexamined the same problem (20).

The changes in acquisition management fostered by Mr. Packard were incorporated into DoD Directive 5000.1, Major System Acquisitions, which was first issued in 1971. In 1976, the Office of Federal Procurement Policy issued Circular A-109, establishing a federal policy for acquisition. (Circular A 109 is now issued by OMB.) Circular A-109 requires that:

> Development of a single system design concept that has not been competitively selected should be considered only if justified by factors such as urgency of need or by the physical and financial impracticality of demonstrating alternatives [27:10].

This requirement for competition stipulated by Circular A-109 has been fully recognized in a revised DoD Directive 5000.1.

But while the framework for weapons systems acquisitions has now been standardized, considerable latitude is given in how particular programs are managed. It can be safety stated that no two system acquisition programs are alike (8:6), and that change is the only constant in a system development. These changes occur both philosophically, such as in the acquisition strategies to be used, and technologically, such as when new requirements or processes for manufacture emerge.

As regards the philosophical changes:

> Constant changes in acquisition strategy have been made in an attempt to eliminate the problems of a previous strategy; e.g., fly-before-buy, total package procurement, two-step procurement, and life cycle cost/design to cost have all been used over the past 20 years as acquisition strategies. . . [13:3].

Technological changes, as used herein, refer not only to hardward changes, but also to factors that influence these hardware changes for a given weapons system. Although the following quote may be somewhat exaggerated, it does illustrate the pervasive nature of technological change in a weapons system development.

> . . . the operational requirements for defense systems may change one or more times a year. After each change, Government and industry managers must prepare new plans, new schedules, and new budgets. This process occurs repeatedly during the validation stage of an acquisition program and throughout the remainder of the life of the program [10:106].

The dynamic, continually changing environment of major systems acquisitions also impacts on support functions that must concurrently develop, acquire, and deploy support equipment and facilities required by the weapons system. In the area of facilities support, for instance, changes concerning weapons system acquisition strategies can affect facility development schedules and acquisition timetables. Technical changes, on the other hand, can alter facility designs or construction methods, and also impact on schedules and integration requirements.

When a competitive prototyping acquisition strategy is employed for a weapons system, additional problems of safeguarding contractor sensitive information in a manner so as

to not "favor one of the contractors and to avoid technical transfusion between competing proposals [2:185]" must also be solved. Additionally, initial designs and development work for facilities and support equipment may have to be duplicated until the competitive prototype phase is complete and a final choice is made about further development of a single system.

The resolution of problems created by such a dynamic philosophical and technical environment is further exacerbated by the different developmental tracks that weapons systems hardware and facilities follow. The weapons system, for instance, is managed by a single program manager (PM) and the system program office (SPO) to establish a single point of contact for all engineering, financial, and managerial direction required by the weapons system contractor. Also, all funding is obtained through the annual military appropriations bills in the categories of research and development and procurement.

The facilities acquisition process, on the other hand, is initiated by the base at which the facility is to be built, can be designed by in-service or contract personnel, can be managed during construction by the Air Force, the Army Corps of Engineers, or the Navy Facilities Engineering Command (depending on the location and urgency), is financially administered by an Air Force Regional Civil Engineer (AFRCE), is built by a local area building contractor, and accepted by the host base civil engineering organization, the AFRCE,

and the MAJCOM. Funding for facilities support is obtained through the Military Construction Appropriation from Congress, which is a separate appropriation and follows a slightly different budget cycle than other general fund appropriations (26:66).

Statement of Problem

In order to achieve a common initial operational capability (IOC) date, all of the aforementioned problems must be dealt with and solved for the concurrent development and acquisition of both the weapons system hardware and the support facilities. But the interface points between the weapons system acquisition process and the facilities acquisition process do not seem to be well understood by all affected parties, nor is their impact on system timetables and schedules fully determined.

This research effort, then, will explore the interface points between the weapons system acquisition process and the facilities acquisition process, when both developmental processes have the same IOC constraint at the first base to operationally deploy the new weapons system and the weapons system is acquired under the competitive flyoff strategy.

While it is impossible to adequately address every facet of the management problems inherent in the acquisition of facilities to support new weapons system beddowns, the intent of this study is to test the hypothesis that the

procedural requirements of the formal military construction program (MCP) are not responsive to time constraints necessary for the acquisition of new or remodeled facilities required to support the initial beddown of new weapons systems acquired under the fly-before-buy/competitive flyoff strategy.

A definitive acceptance of this hypothesis could lead to different procedures for developing and acquiring support facilities for new weapons system beddowns, and can more accurately focus management attention on those particular areas where procedural changes would be most effective.

Research Objectives

In order to test the hypothesis stated above, the primary objective of this research is to develop a PERT/time network for the integrated weapons system/facilities acquisition process, determine the critical path activities and duration for this integrated network, and examine the influence of integrating activities within the integrated network. This primary objective will be achieved by accomplishing the following subobjectives:

1. Provide a broad overview of the facilities acquisition process and the weapons system acquisition process, with special attention given the competitive flyoff acquisition strategy, so as to establish a common information baseline for all subsequent analysis. Additionally, providing such an overview will provide integrating information for readers who are not familiar with the weapons system

acquisition process of the facilities acquisition process;

2. Develop a PERT network diagram for the facilities acquisition process, and a probability distribution for the duration of the facilities acquisition process from the PERT network;

3. Develop a probability distribution for the weapons system acquisition process;

4. Develop a PERT network diagram for the weapons system acquisition process, and use it as the model for competitive flyoff weapons system acquisition procedures;

5. Determine the critical path for each network diagram developed in subobjectives 2 and 4 above, and perform some comparative analyses between the two networks.

Justification

The use of network analysis in the evaluation of this research hypothesis has a number of significant analytical advantages. First, network analysis can tell the whole story by showing all critical relationships between different activities (14:136). A prime consideration in this research effort is that network analysis also increases awareness of the problems involved, and their relative importance in the overall operation (5:1). Finally, network analysis offers flexibility in the level of aggregation used in developing the network, with different levels of summarization available for different levels of management. Aggregate networks help to eliminate the parochial viewpoint that each department

or agency has in its own view of the project and their particular place in it (14:137-138).

Network analysis based on completion of the previously noted subobjectives offers an opportunity to identify critical interrelationships and allow better planning and enhanced control in future developments.

Scope/Limitations

The competitive flyoff acquisition strategy will be the only acquisition strategy studied because of time constraints on the study. Because only one strategy can be studied, the competitive flyoff strategy has three properties which make it especially worthy of analysis. The first of these properties concerns the dual development that characterizes the initial stages of this weapons system acquisition strategy. This dual system development requires some redundancy in systems support, such as when different facilities requirements must be planned for both weapons systems in the competition. The second property concerns the safeguarding of competition sensitive information during the initial stages of the acquisition process, so as to not give one contractor any kind of unfair advantages over another. The third and final property relates to the different schedule milestones that are encountered in a competitive strategy. This reflects the fact that different weapons systems under consideration in a competitive strategy will not have the same schedule milestones for deployment, due to

manufacturing and design differences, as well as such factors as leadtime requirements for major components and other supplier constraints.

These three properties distinguish the competitive flyoff strategy from other acquisition strategies so much so that an analysis of facilities support for the competitive flyoff strategy may not be precisely relevant for any other weapons system acquisition strategy. But these same constraints could be especially demanding of facilities support efforts and, therefore, warrant initial attention.

The A-10 weapons system will be used as the model for the weapons system acquisition process because it was the first system since the TPP era to be fully developed and procured under the competitive flyoff strategy. Also, the A-10 system development appears to be representative of development using the competitive flyoff strategy for all weapons systems, and development data is readily available for analysis.

The facility acquisition process analysis will be based on the construction of a single facility that costs approximately $5 million and is funded through the MCP. Basing the analysis on a single facility still allows for concurrent development of other facilities that may be required to meet an IOC, but does not overly complicate the network with multiple parallel development plans for each facility being acquired under the same MCP funding appropriation. It should be noted that the facility being assumed for acquisition in

this study does not imply that that kind of facility, or facilities of the same general characteristics, are required to beddown new weapons systems. Many weapons systems beddowns require no MCP-funded facility construction, and some require even more than is assumed to be required here.

Also, the facility studied in the network will be assumed to be a high priority project with the Army Corps of Engineers serving as the design and construction agent. Other general assumptions are that: 1) the facility development will require an environmental assessment, but with a finding of no significant impact (FONSI); 2) the major command who will operate the weapons system at the beddown base also has the responsibility for the base; and 3) the major command will be designated to serve as the AFRCE, rather than one of the three regional AFRCEs under Headquarters, USAF. From the discussion with Mr. George Taylor, Chief of Systems Facilities Branch, Aeronautical Systems Division Civil Engineering, these conditions present reasonable and not atypical construction program characteristics for a new weapons system beddown (23).

Finally, another basic assumption is that the facility must be fully operational before the IOC can be considered complete. This necessarily precludes operational use of the weapons system until the facility is fully operational.

CHAPTER 2

THE ACQUISITION PROCESSES

Before a full understanding of the integrated weapons system acquisition process/facilities acquisition process can be obtained, it is first necessary to establish a common baseline of information for comparison and analysis. This chapter will offer a brief overview of the weapons system acquisition process and the facilities acquisition process. Because of the complexity of each of these acquisition processes, only the most important elements of each will be presented here, with the intent being to capture those elements of each acquisition that are common to all applications of such an acquisition.

This broad overview is intended to provide the baseline of information for the more detailed analysis that is the focus of this research effort, and it is also intended to give the reader a more complete understanding concerning the whole acquisition process. Additionally, it will help put the more detailed PERT networks in perspective and, hopefully, make them easier to understand and interpret. The overview presented is intended to be descriptive rather than normative, so as to enhance understanding as much as possible and yet not be prescriptive regarding any particular acquisition strategy or methodology.

The weapons system acquisition process will be described first, since it is preeminent over and encompasses the facilities acquisition process in the development and deployment of a weapons system.

The Weapons System Acquisition Process

The weapons system acquisition (WSA) process for major weapons systems consists of five phases, with three major decision points. The five phases are the conceptual phase, the validation phase, the full-scale development phase, the production phase, and, finally, the deployment phase. The three major decision points are called Milestones I, II, and III, and require approval from the Secretary of Defense (SECDEF) before the WSA for that particular system can proceed.

Even before the conceptual phase begins, however, an operational need must exist to justify the development of a new weapons system.

> The Air Force looks to the major commands to continuously analyze their mission capabilities and identify operational needs. Operational needs may result from a projected deficiency or obsolescence in existing systems, a technological opportunity, or an opportunity to reduce cost [8:11].

A Statement of Operational Need (SON) is developed for those operational needs that cannot be satisfied with existing capabilities, and that will likely lead to a new system development. Validation of the SON by the appropriate authority constitutes the Milestone 0/Program Initiation decision and commencement of the conceptual phase. For major

systems, an additional document, the Mission Element Need Statement (MENS) is prepared and used to communicate the need to the SECDEF before the Milestone 0/Program Initiation Decision.

> Following SECDEF approval of the MENS, HQ USAF provides formal direction to the implementing and participating commands by using a Program Management Directive (PMD). The PMD is used during the entire acquisition life cycle to state requirements and request studies as well as initiate, approve, transfer, modify or terminate programs [8:18].

The Conceptual Phase

The conceptual phase is highly iterative, but can be categorized into three sections: identification, analysis, and approach preparation.

The identification section is concerned with identifying alternative means of satisfying the Statement of Need. Industrial contractors, government laboratories, and educational institutions can all be involved in the identification of alternatives to meet the mission need. Active participation by the operational command is also required during the identification of alternatives effort to insure system alternatives properly reflect user needs and preferences.

Rigorous analysis is performed on all of the proposed alternative solutions to determine the feasibility and the risks involved in the proposals. Theoretical cost estimates are developed, as well as many tradeoff studies, and some "breadboard" studies may also be performed to support assertions or proposals (17:2).

The approach preparation section of the conceptual phase concerns the formulation of the management team and the generation of the management program to be used for further development of the system. During the conceptual phase, the program manager is designated, along with the charter stating his responsibility, authority, and accountability (8:19). A functional baseline for the weapons system is established by the newly-formed program office during this phase that includes broad system performance objectives, an operational concept, a logistics concept, and cost estimates (3:2-8).

Another major product of this phase is the Program Management Plan (PMP). This includes initial development of the Statement of Work (SOW) and Request for Proposal (RFP), as well as specifying the basic management approach to be used in any further phases of the program. The PMP also specifies aspects of program office/contractor relationships, the types of management reports to be generated, the Program Cost Schedule Control System (PCSCS), the master program schedule, the targeted IOC date, and other managerial control information (3:2-9).

The findings and recommendations generated during the analysis period of the conceptual phase are consolidated into a decision coordinating paper (DCP) that is presented for DSARC I review and subsequent DSARC recommendations concerning program continuation. The DSARC recommendations are presented to the SECDEF for his approval. The SECDEF-approved

DCP constitutes the program continuation decision and Milestone I.

The Validation Phase

The SECDEF's approval at Milestone I is communicated to the system program office (SPO) through a revised PMD, which initiates the validation phase of the system acquisition process. The objectives of the validation phase are to determine whether to proceed with full-scale development for the system, and to establish firm and realistic performance specifications which meet the operational and support requirements (3:3-5). The thrust of the effort to meet these objectives is to reduce the technical risk and economic uncertainty through a more detailed definition of the new system.

The validation phase is typically accomplished predominantly by defense contractors under SPO direction in one of three ways: 1) design definition paper studies, 2) hardware prototyping, or 3) some combination of both (17:2).

Design definition is an approach to validation wherein two or more defense contractors, under the SPO's direction, use system studies and detailed engineering analysis to define the proposed system. The resultant products, using this strategy, are detailed system specifications, performance specifications, initial hardware configuration specifications, refined cost estimates, and schedule projections. This detailed paperwork is then used by a source selection board to

evaluate the proposals and detailed studies and select the best proposed system for further development (17:2-3).

In the hardware prototyping strategy, actual system hardware is fabricated and evaluated in a competitive flyoff. For a flying system such as a new fighter aircraft, this involves building and flying a testbed system. It is important to understand that this approach is concerned with "the fabrication of a system resembling the operational system only to the extent that performance objectives can be validated [1:55]." The data gathered from the competitive flyoff constitute part of what is presented to a source selection board for evaluation and selection of the best system for further development.

While the hardware prototyping strategy has achieved its greatest notoriety from whole system competitive flyoffs, it is also used extensively for subsystem development, test, and evaluation. Avionics, armaments, propulsion systems, and almost all other subsystems can be competitively tested. In very large system acquisitions, where a total system competitive flyoff is cost prohibitive, subsystem hardware "competitive flyoffs" can and have been successfully employed.

A corollary effort to the hardware fabrication and testing effort in the competitive flyoff strategy is the development of contractor, full-scale development program management plans. These plans are structured so they can be implemented contractually for full-scale development. These plans must specifically answer questions concerning system

producibility, management ability, and other system specific information (3:3-8).

Near the end of the validation phase, the source selection authority will select that system that is recommended for further development in the full-scale development phase of the WSA process. Also in the validation phase, the SPO develops the RFP for the full-scale development phase.

The SPO also generates an updated DCP at the end of the validation phase that is forwarded through the DSARC process for DSARC II and subsequent SECDEF approval. SECDEF approval of the updated DCP constitutes Milestone II, or the Ratification Decision, and the commencement of the full-scale development phase (3:3-11).

Approval to proceed into the full-scale development phase is based on assurance that:

> (1) System tradeoffs have produced a balanced and realistic set of performance parameters.
> (2) Risk areas have been identified and reduced to acceptable levels.
> (3) Cost/schedule estimates for full-scale development are acceptable.
> (4) Contractual aspects are sound (terms and conditions are appropriate to risk, and funding related to milestones) [3:3-11].

The Full-Scale Development Phase

The full-scale development phase follows the validation phase, with the objective of this phase being the fabrication and testing of pre-production prototypes. To accomplish this objective, the system design is finalized with comprehensive and complete design reviews, and engineering drawings

are prepared. It is also during this phase that the critical design review is held, which is the "last chance to comment on the developing design before commitment to accept the design [8:35]."

A major effort during this phase is development, test, and evaluation (DT&E). The DT&E purpose is to:

- Demonstrate that engineering design and development are complete,
- [Demonstrate that] design risks have been minimized,
- Demonstrate that the system or equipment meet specifications, and,
- Verify that proposed design changes do not degrade overall system performance [8:37].

Another type of testing conducted during the full-scale development phase is initial operational test and evaluation (IOT&E). The objectives of IOT&E are to:

- Estimate military utility, operational effectiveness and suitability;
- Provide feedback prior to key milestone decisions;
- Demonstrate that the system can be supported logistically in a deployment status;
- Identify new uses for the system; and
- Reshape tactics [8:39].

The IOT&E is an operational assessment of a system where the whole system is evaluated against operational criteria. IOT&E is the complete system-testing conducted before a production decision, while complete system-testing after a production decision is called follow-on operational test and evaluation (FOT&E).

It is important to note that the prototype fabricated during the validation phase for a competitive prototyping strategy is different from the pre-production prototypes fabricated during the full-scale development phase. The

prototypes fabricated during the full-scale development phase are "more representative of the operational system than was the validation phase prototype, which emphasized performance characteristics [17:3]."

During the full-scale development phase, detailed logistics support planning, deployment planning, and training plans are formulated to support the production decision and the production phase. Extensive production planning and some limited expenditure on production may also occur during this phase (3:4-6).

After sufficient testing and developmental planning, a revised and updated DCP is prepared and submitted to the Secretary of the Air Force for review. The DCP then proceeds through DSARC III for approval and is then forwarded to the SECDEF for his approval. His approval constitutes the production decision and the initiation of the production phase and Milestone III.

The Production Phase

The fourth phase of the weapons system acquisition process is the production phase. During this phase, the system enters into production in two distinct periods. In the first period, initial tooling and production is accomplished to bring the system production to the planned peak rate. The second period is concerned with follow-on production after the peak rate is achieved (3:5-1).

Sometime during this phase, program management

responsibility transfer (PMRT) is also accomplished. PMRT is the formal act of termination of the implementing command's program management responsibility and the transfer of that responsibility to the Air Force Logistics Command (AFLC) (3:5-6).

One of the main management functions during the production phase is the physical configuration audit (PCA). During this audit, the detailed specifications are compared with the production hardware and all acceptance tests are verified to be complete.

The Deployment Phase

Immediately following the production phase, and most often concurrent with it, the deployment phase covers the introduction of the new system into the field for operational use. In this stage all support facilities and equipment must be fully developed and ready for use. This includes activation and operation of depot support for the system, as well as all required support at operational bases.

Congressional review and funding of the WSA is accomplished during all five phases of the WSA process. SECDEF decisions at Milestones 0, I, II, and III must subsequently be included in the Five Year Defense Plan (FYDP) at the next Program Objectives Memorandum (POM) submission (8:18). This insures Congressional review and Congressional control of each specific weapons system acquisition program's funding and schedule.

The Facilities Acquisition Process

The facilities acquisition process often acts in support of the weapons system acquisition process to provide new or modified facilities to support the weapons system operation, but the facilities acquisition process also acts independently to provide support facilities not associated with any particular weapons system. Despite the reason for the facility, or how the requirement for the facility is generated, all facility acquisitions follow essentially the same process. Those construction projects with a funded cost of less than $500,000 do not require submittal through the military construction program (MCP), while those projects with a funded cost over $500,000 do require submittal through the MCP (25:2-8). This review of the facilities acquisition process will only cover the formal MCP process.

There are essentially four phases to the facilities acquisition process under the MCP. They are: 1) requirements identification and justification, 2) programming and funding, 3) design, and 4) construction.

The Requirements Phase

The requirement for a new facility may come from many sources. It may be generated as a result of a mission change for the base wherein existing facilities cannot adequately support the new mission. In these situations, the requirement for new facilities originates with an agency or office not located on the host base. This is the type of requirement

of concern in this research. For a new weapons system bed-down, for instance, the facility requirements to support the new weapons system are generated by the weapons system prime contractor, who then forwards them to the host base civil engineering organization and, concurrently, to the civil engineering organization advising the SPO. The host base civil engineering organization, in conjunction with the civil engineering organization advising the SPO, then determines which existing facilities are adequate to support the new mission, which facilities will have to be modified, and what new facilities will have to be built.

New facility requirements may also be generated by deficiencies in support of already existing base missions. Requirements of this type require strong justification by the user to fully document the deficiency and its impact on the user's mission.

Another means of identifying new facility requirements is when existing facilities must be replaced due to structural unsoundness, catastrophic damage, or because of hazards to health and safety. This type of requirement also includes replacing facilities that have deteriorated to the point they are not economical to maintain or operate. Extensive user participation in the justification is also required for this type of requirement identification to support the action proposed (25:3-1).

The Programming Phase

No matter how the requirement for a new facility is generated, the programming phase begins with the host base civil engineering organization. The host base civil engineering organization prepares an annual MCP submittal package (DD Form 1391, Military Construction Project Data) as specified in AFR 86-1, Programming Civil Engineer Resources, and in the MCP submittal guidance. This submittal package includes essential project information to support review requirements at higher command levels.

The initial DD Form 1391 package is submitted to the major command (MAJCOM) when the MAJCOM relays the MCP call message from HQ USAF to the bases for the annual MCP submittal. The MAJCOM reviews the base submittal for accuracy and completeness, and forwards the MAJCOM-supported program to HQ USAF by the date specified in the call notice.

HQ USAF reviews the submittals from the MAJCOMs and selects the projects that will be included in the POM and forwarded for OSD and Congressional review, approval, and funding. After HQ USAF has selected the supported program, design instructions are issued by HQ USAF to the MAJCOM or the AFRCE designated to be the project manager for those projects being supported, so that 35 percent design completion can be accomplished before the MCP program is presented to Congress.

After the base civil engineering organization has submitted the initial DD form 1391 package, work begins on

the full DD Form 1391 package and the project book (PB) for the projects being supported by the MAJCOM. This more complete documentation includes information essential to the design and construction of the project. This information is sent to the MAJCOM when it is requested, where it is reviewed and forwarded to HQ USAF and to the AFRCE, if the AFRCE is the design and construction management agency. The PB is prepared in accordance with instructions contained in AFR 89-1, Design and Construction Management.

After the PB is received at HQ USAF, the program is sent to OSD for review, and then it is sent to Congress for authorization and appropriation. The MCP is sent to Congress on the 15th of January each year, and Congress then holds hearings on it, with approval usually occurring in the following September. Funding is obtained after the President signs the bill and apportionment is accomplished.

The Design Phase

The design phase begins when HQ USAF issues design instructions as noted in the previous section. This design instruction is issued to the AFRCE, or the MAJCOM designated to function as the AFRCE, who then commences the design with an in-service design agent or initiates the selection of an Architecture-Engineering (A-E) firm to perform the design under contract. The Army Corps of Engineers or the Navy Facilities Engineering Command, as well as the Air Force MAJCOM, can serve as the in-service design agent. The determination of

an in-service or contract design is predicated on the type of project, urgency, and any special design considerations that may be required (11:12).

The design effort must be at least 35 percent complete before the project is forwarded to Congress for funding (19: 26) so the design phase occurs concurrently with the latter elements of the programming and funding phase. The objective is to have the facility 100 percent designed and construction contract preparation complete when the MCP bill is signed and the funding is apportioned.

The design effort involves extensive cooperation, coordination, and review by all interested and affected parties. This includes the user, the MAJCOM, the AFRCE, the base and the design agent, and involves extensive reviews at specific stages of design as specified in AFR 89-1. This close and detailed involvement in the design stage is intended to insure a minimum of design changes and maximize effectiveness for the using organization.

The Construction Phase

The construction phase begins as soon as the invitation for bids (IFB) is prepared and distributed to interested contractors. After bids are received and the contract awarded, a pre-construction conference is held to acquaint the contractor with any constraints that must be met concerning site access, material storage, and other preliminary information. The facility is then constructed by the contractor under the

supervision of the construction agent, which is normally the same agency that served as the design agent. Continuing inspections of the facility during construction are accomplished by AFRCE representatives, and any deficiencies or corrections identified through these inspections are reported to the AFRCE, who then works through the construction agent to effect corrective action.

After the basic contract is complete, a pre-final inspection is accomplished, and all known deficiencies are identified for contractor corrective action. When all corrective action is complete, a final inspection is held, and if the facility is acceptable, the Air Force assumes responsibility and accountability for the facility from the contractor.

Once the facility transfer is complete, equipment installation that is not part of the basic contract can commence. After all necessary equipment is installed and functionally checked, the facility is made available for user occupancy.

The foregoing reviews of the acquisition process have been intentionally broad and general in scope. This was done to provide a common foundation for further analysis. Subsequent analysis of each acquisition process for development of the network diagrams will build on this foundation and supply more detail for selected parts of the acquisition processes.

CHAPTER 3

METHODOLOGY

This chapter will discuss and explain the specific methodology used to acquire the data necessary to develop the independent facilities acquisition network, the weapons system acquisition network, and the integrated facility/ weapons system acquisition network.

In order to accomplish subobjectives 2 and 4, as stated in Chapter 1, two similar but different methodologies for data acquisition and organization were used. Each different methodology will be discussed as it relates to the accomplishment of either subobjective 2 or subobjective 4. Additionally, a third methodology, related to acquiring descriptions and data concerning the interfaces between the facilities and weapons system acquisition processes, will be discussed. Each of these three different investigatory methodologies was required because of the different ways in which the pertinent data elements were determined.

Three separate acquisition system models (activity networks) were also developed and will be discussed. These three models are: 1) the facility acquisition network model, 2) the weapons system acquisition network model, and 3) the integrated facility/weapons system acquisition network model. The facility acquisition network and the weapons system

acquisition network models were initially developed as stand-alone models, and they were then integrated into a single model--the integrated facility/weapons system acquisition network model.

The facility acquisition network data element determination and the associated model development will be discussed first. The weapons system acquisition network data element determination and its associated model development will be discussed second. Finally, the integration of the two models, and the determination of the necessary data elements to allow this integration will be discussed.

Facility Acquisition Network

The facility acquisition network model was derived primarily from the Facility Item X-amination (FIX) study conducted by the Engineering and Services staff at Air Force Logistics Command Headquarters in June 1980. The objective of that study was to develop a comprehensive model network for the facility acquisition process. To accomplish that objective, each of the major directorates under the Deputy Chief of Staff for Engineering and Services was tasked to prepare comprehensive networks for their functional area as it related to construction of a major MCP-funded facility. For instance, the Programs Directorate was tasked to identify all activities and events concerning project identification and programming, while the Engineering and Construction Directorate was tasked to identify all events and activities

related to facility design and construction (24:3).

These separately developed parts were then combined into a whole, complete network. The combined network had 756 activities identified, which resulted in a very detailed, but somewhat incomprehensible, facility acquisition network. The FIX project was never fully debugged or completed, however, because it was superceded by more urgent studies and requirements (7).

The data elements from the FIX network were used as the basis for the facility acquisition network developed for this study, but with some important changes. The first of these changes was the combination of many of the activities into one activity whenever possible. This higher level of aggregation resulted in a simpler, more easily understood network, but at the cost of some detail. This aggregation was necessary, however, because the extreme detail of the FIX network made it difficult to understand the network as a whole. There was so much detail that it was difficult to identify the essential tasks and activities, difficult to comprehend the total process work and information flow, and difficult to identify critical decision points in the process. These essential activities and events were masked by the sheer volume of information that was presented.

A second reason why the network was aggregated and condensed was because it was to be used as an input to the integrated acquisition network, and that network had to be comprehensible too. Because essentially all activities in

the facilities acquisition network were to be included in the integrated network, any excess complexity in the facility acquisition network would be continued in the integrated network, making it more difficult to analyze and understand.

Consistent with standard PERT practice (4; 5; 6), three time estimates (optimistic, most likely, and pessimistic) were developed for each activity in the facility acquisition network. These time estimates were derived from time estimates in the FIX network and by personal interviews with personnel on the AFLC Engineering and Services staff. Initial time estimates for the aggregated network were determined by simply adding corresponding time estimates between events in the FIX network that defined the aggregated activity. This method, however, causes a distortion of the probability distribution for the optimistic and pessimistic time estimates and could not be considered reliable for these time values. Such a methodology does not tend to disturb the most likely time estimate for the aggregated activity, however.

To verify the accuracy of the most likely time estimates as determined from the FIX network, and to more accurately assess the pessimistic and optimistic time estimates, personal interviews were held with the AFLC Engineering and Services staff. During these interviews, the staff personnel were asked for the optimistic, most likely, and pessimistic times for activities as they appear in the aggregated network. In all cases, the time estimates for the most likely times were consistent with the most likely time estimates determined

from the FIX network. The time estimates for pessimistic and optimistic times were used as determined from the interviews and not from the FIX network summation.

As an example, let Figure 1a represent the activities and events in part of the FIX network, and let Figure 1b represent the corresponding aggregated activity as in this study. The initial estimate of the time values for Figure 1b were obtained by summing the longest path in Figure 1a, or v, w, x, y, z and using the sums as values for aggregated activity A, as shown.

But since the optimistic and pessimistic time estimates in Figure 1b do not reflect the 1 in 100 chance for activity completion required for the beta distribution, the time estimates obtained from the personal interviews were used. Thus, the time estimates used for this analysis might turn out to be as shown in Figure 1c.

The logic of the facility acquisition network model was verified by having several civil engineering officers with various experience backgrounds review the model for consistency and completeness. Particular attention was paid to predecessor/successor event logic relationships in the model formulation, and these relationships were verified from elements of the FIX network, from the personal interviews, and by the civil engineering officer reviews.

The correlated and verified data were then used to develop the facility acquisition model for this study. Appendix A contains the data input to the facility acquisition

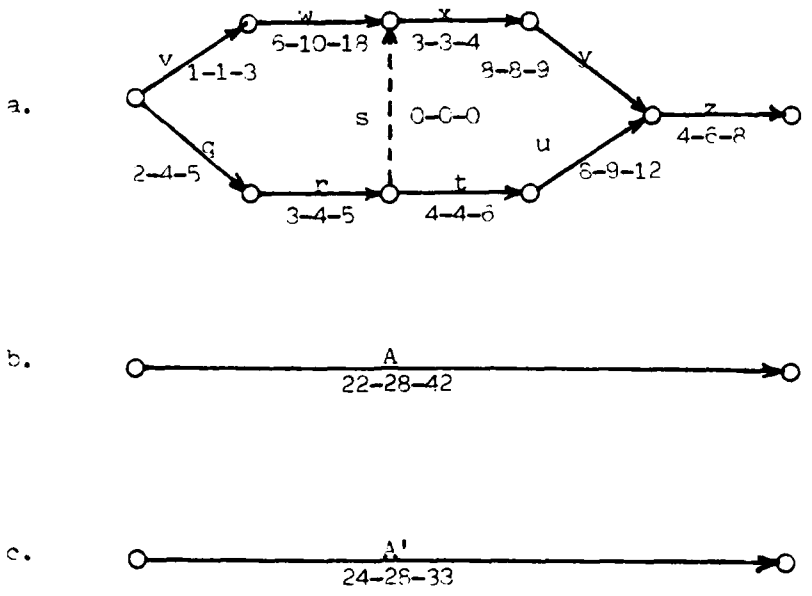


Figure 1

Time Estimate Determination

network model. The predecessor and successor event numbers defining each activity are given, as are the activity description and the time estimates used. It is important to note that all time estimates were input in weeks and days format. The last digit of each time estimate is days, but all digits preceding the last digit designates the activity duration in weeks. Thus, a time estimate of 213 means 21 weeks and 3 days, while a time estimate of 105 means 10 weeks and 5 days. Also included in the appendix is a numerical designator and description of the events in the facility network model.

Weapons System Acquisition Network

The data acquisition procedure for developing the weapons system acquisition model differed from the facility acquisition network model development because the A-10 weapons system had been selected as the model baseline and actual historical data were available and used. In other words, instead of a theoretical data baseline being used as in the facility acquisition model, actual dates and time interval data were available and used in the weapons system acquisition model development.

Further, only one activity duration time interval was used with each activity designated in the network, and the time interval used was the actual time required for accomplishment. This approach was used because data were not available to determine the optimistic, most likely, and pessimistic time estimates for each activity, but were available for the actual time durations that occurred. The problem with this approach is that the use of only one time estimate does not allow the development of a beta distribution for each activity, and thus does not allow the determination of variance for each activity in the network. The computer program used for analysis uses the single, actual activity time value the same way it uses the expected time value derived from the beta distribution when three time estimates are given.

The use of actual time data and only one time estimate is not to imply that there is not a great deal of variance

within individual activities and within major phases of a weapons system acquisition process. As was pointed out in Chapter 1, no two weapons system acquisitions are alike, and thus different time durations for their development must be expected.

Figure 2 shows various time estimates for the different phases of a weapons system acquisition. The variables of size of the program, importance of the program, acquisition strategy used, manpower available, funding, and other variables will all influence the system development and acquisition times for a given weapons system. The A-10 system development represents only one case of weapons system acquisition times, and using actual dates can only capture a "snapshot" of a dynamic situation.

Even though using the actual A-10 development times represents only one point on a continuum of possible development times, the A-10 system development as a whole is not inconsistent with the development times for other modern fighter and attack aircraft weapons systems. Table 1 shows major milestone dates for all major aircraft weapons systems since World War II, including prototype developments (designated by a P) and the A-10 system. The mean time between development start (FSD) and first flight for all tabulated fighter and attack aircraft systems, excluding prototypes, is 24 months, with a range of 9 to 37 months. The A-10 system took 25 months, a difference of only one month and less than $.143\sigma$ (σ = 7.09 months) from the mean value. The mean time

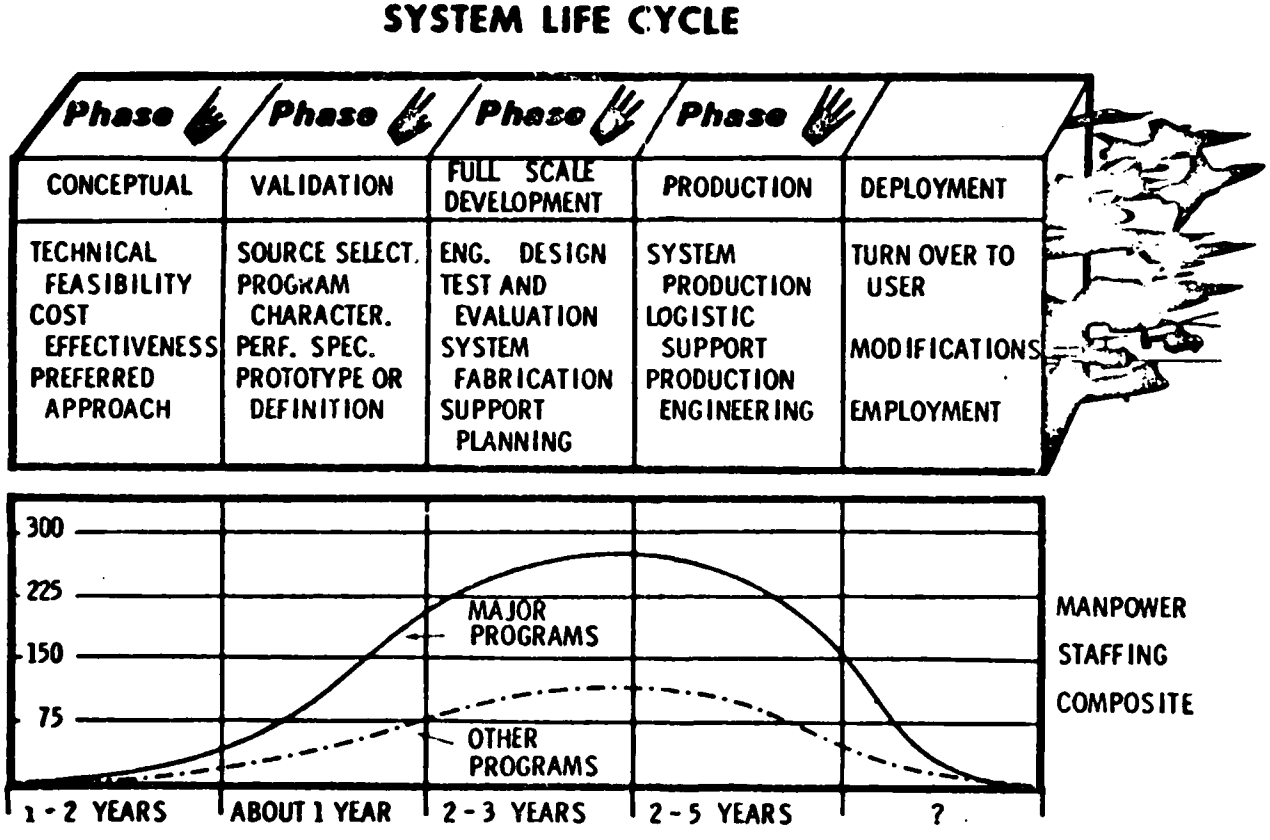


Figure 2

System Life Cycle [1:37]

for months to first delivery from FSD start for fighter and attack aircraft, again excluding prototypes, is 39.68 months, with a range of 14 to 68 months. Here the A-10 system took 34 months, a difference of 5.68 months, or .35σ (σ = 15.96 months) from the mean.

The data in Table 1 span three decades, however, and it may reasonably be asked does this data display any trends, for instance, is "months from FSD to IOC" changing over time? Rand researchers who developed Table 1 did a regression analysis to test for trends in the time period from FSD start to first flight (column 3 in Table 1). The regression analysis yielded a line of nearly zero slope, indicating no statistical evidence that a trend has developed in the time from FSD start to first flight over the three decades encompassed by the data of Table 1, for fighter and attack aircraft only (20:25).

A similar regression analysis for the time from FSD start to first operational delivery was performed by the Rand researchers (column 5 in Table 1), again to test for trends over the three decade span. For fighter and attack types only, excluding prototypes, the analysis yielded a slope of plus five months per decade, with a significance probability of 15 percent (20:25). This finding led the Rand Corporation researchers to conclude that:

> Although the regression tests suggest a change in interval duration of several months per decade, the large significance probability associated with all of the tests suggests some caution in asserting that any real change has occurred [20:25].

TABLE 1

ACQUISITION INTERVALS FOR SELECTED AIRCRAFT SYSTEMS

Model		Development Start Date (1)	First Flight Date (2)	Months to First Flight (3)	First Operational Delivery (4)	Months to First Delivery (5)	200th Operational Delivery (6)	Months to 200th Delivery (7)	Time to Produce 200 a/c (8)
F-84	P	11/44	2/46	15	6/47	31	4/48	41	10
F-84		1/45	1/47	24	6/47	29	4/48	39	10
F-86	P	5/45	10/47	29	5/48	36	10/49	53	17
F-86		12/46	5/48	17	5/48	17	10/49	34	17
F3D	P	4/46	3/48	23	8/50	52	4/53	84	32
F3D		6/48	2/50	20	8/50	26	4/53	58	32
F-89	P	6/46	8/48	26	9/50	51	1/54	91	40
F-89		10/48	6/50	20	9/50	23	1/54	63	40
F-94		10/48	7/49	9	12/49	14	4/51	30	16
F4D	P	12/48	1/51	25	5/55	77	8/57	104	27
F4D			6/54		5/55		8/57		27
F-100	P	10/51	5/53	19	10/53	24	7/55	45	21
F-100		2/52	10/53	20	10/53	20	7/55	41	21
F-101		10/51	9/54	35	5/57	67	5/58	79	12
F-102		9/51	10/53	25	6/55	45	1/57	64	19
F-104	P	3/53	2/54	11	1/57	46	12/58	69	23
F-104		7/54	2/56	19	1/57	30	12/58	53	23
F-105		9/52	10/55	37	5/58	68	4/61	103	35
F-106		11/55	12/56	13	6/58	31	4/60	53	22
F-4		5/55	5/58	36	12/60	67	10/62	89	22
F-111		12/62	12/64	24	4/67	52	12/69	84	32
F-14		2/69	12/70	22	5/72	39	7/76	89	50
F-15		12/69	7/72	31	11/74	59	7/77	91	32
F-16	P	4/72	2/74	22	8/78	76	1/81	105	29
F-16		1/75	12/76	23	8/78	43	1/81	72	29
F-18	P	4/72	6/74	26	5/80	97			
F-18		1/76	11/78	34	5/80	52			
A3D	P	3/49	10/52	43	1/55	70	6/60	135	65
A3B			9/53		1/55		6/60		65
A-4		6/52	6/54	24	8/55	38	12/57	66	28
A-5		6/56	8/58	26	2/60	44			
A-6		1/58	4/60	27	4/62	51	2/67	109	58
A-7		3/64	9/65	18	3/66	24	1/68	46	22
A-10	P	12/70	5/72	17	11/75	59	5/79	101	42
A-10		1/73	2/75	25	11/75	34	5/79	76	42

Table 1, continued

Model	Development Start Date (1)	First Flight Date (2)	Months to First Flight (3)	First Operational Delivery (4)	Months to First Delivery (5)	200th Operational Delivery (6)	Months to 200th Delivery (7)	Time to Produce 200 a/c (8)
B-47 P	10/45	12/47	26	12/50	62	6/52	80	18
B-47	9/48	6/50	21	12/50	27	6/52	45	18
B-52 P	7/48	4/52	45	1/55	78	8/57	109	31
B-52	2/51	8/54	42	1/55	47	8/57	78	31
B-58	2/53	11/56	45	11/59	81			
B-70	12/57	9/64	81	Project canceled during development				
B-1	6/70	12/74	54	Project canceled during development				
C-130 P	7/51	8/54	37	12/55	53	2/59	91	38
C-130	9/52	4/55	31	12/55	39	2/59	77	38
KC-135P	5/52	7/54	26	1/57	56	1/59	80	24
KC-135	8/54	8/56	24	1/57	29	1/59	53	24
C-133	2/53	4/56	38	8/57	54			
P-3	4/58	11/59	19	3/62	47	12/66	104	57
C-141	4/61	12/63	32	10/64	42	4/67	72	30
C-5	10/65	6/68	32	10/69	48			
S-3A	8/69	1/72	29	10/73	50			

(1) Formal start of aircraft development. Usually denoted by issuance of a contract, but sometimes by source selection when formal contract ratification was delayed but design work continued. The date shown applies to start of actual hardware design and development, not to the usual design studies that precede actual development. Occasionally (B-58, for example) a development program was started, then canceled, redirected, and restarted. The last such start is noted in the table.

(2) Date of first flight of the very first flight article to emerge from the specified development project.

(3) (2) - (1), in months.

(4) Date at which the first fully operational configuration was accepted by the using service for operational inventory (as opposed to development testing). Note that this does not coincide with IOC, which usually implies delivery of several aircraft to the using command, while the first operational aircraft may well go to a training unit. The intent here was to mark a milestone in the system development program, not to measure establishment of a true operational capability.

(5) (4) - (1), in months.

(6) Date of delivery of the 200th operational item (again excluding the units produced for development testing).

(7) (6) - (4), in months.

(8) (6) - (1), in months. [20:22-24]

The Rand researchers also did a regression analysis for the time from FSD start to 200th operational delivery for fighter and attack types only, excluding prototypes (column 7 of Table 1). The results showed a slope of 12 months per decade and a significance probability of 4 percent (20:30).

From their analysis, the Rand researchers concluded overall that:

> Changes in typical interval duration have been less pronounced in the phases immediately after the start of full-scale development. In fact, there is no evidence that the time required for the initial engineering development of the system has changed significantly during the past three decades. This is rather impressive, considering that aircraft of recent vintage tend to be much more complex than those of earlier times.
>
> Although there is some slight evidence that the test phase (between first flight and first operational delivery) has been lengthening somewhat, the statistical support for such a trend is very weak. . . .
>
> Finally, a clear change has occurred in the production phase of aircraft systems, where average production rate has been steadily decreasing over time [20:36].

The analysis of trends in the data from Table 1 suggests that a better approximation of expectations for future weapons system development times might be obtained by using only the more recent data of Table 1 for analysis. This conclusion seems especially relevant when the time interval under study includes part of the production phase.

To illustrate the impact of using only the more recent data for weapons system development times for fighter and attack types only, excluding prototypes, Figure 3 shows the scatter diagram and empirical distribution for the months to first delivery from FSD start, FSD start to 200th delivery,

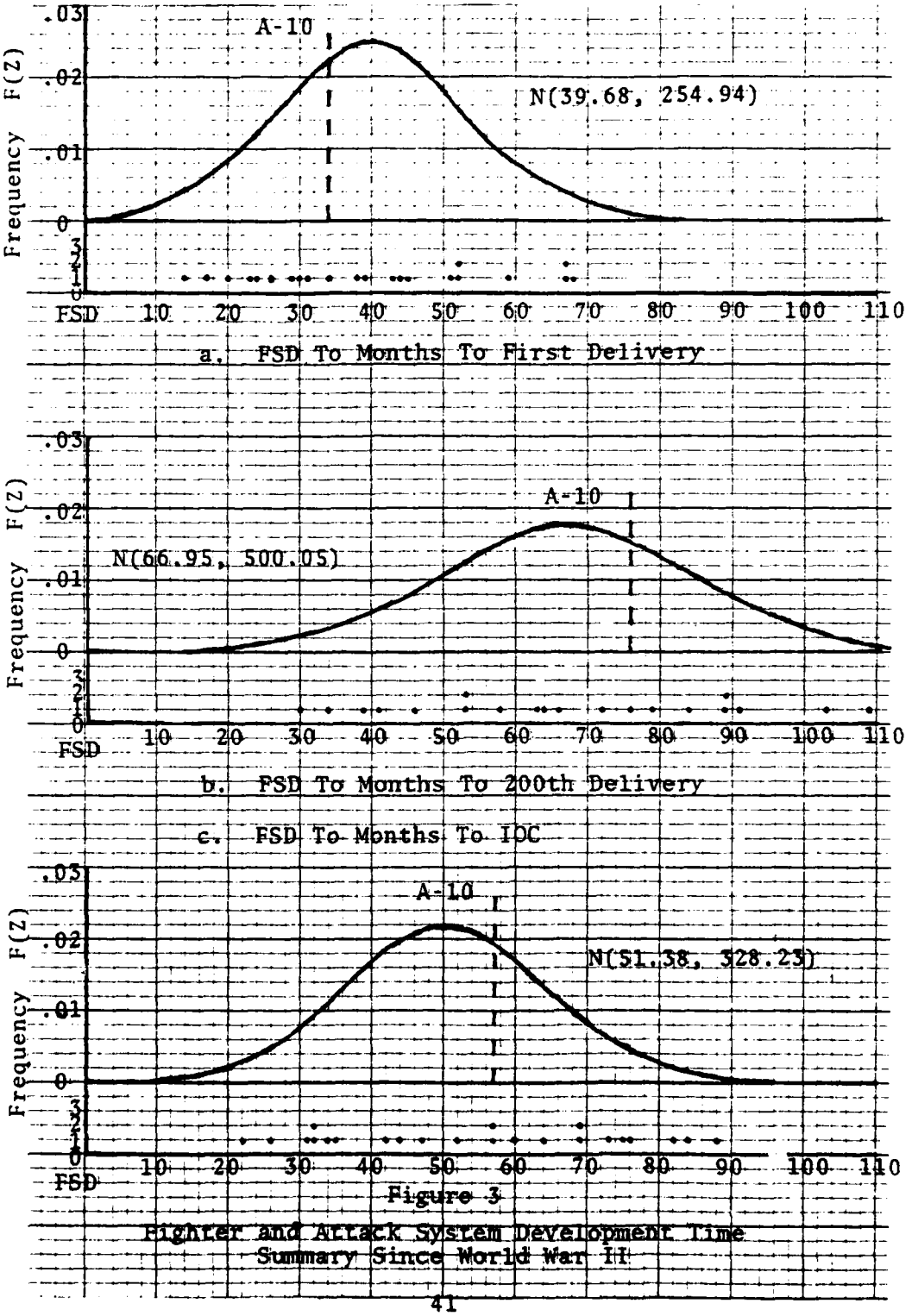


Figure 3

Fighter and Attack System Development Time Summary Since World War II

and FSD start to IOC for the data in Table 1. The data on the time from FSD to IOC are not included in Table 1, but were available from information in the Appendices of the same Rand report (20:44-76). The empirical distribution has been assumed to be normal, and the mean and variance for each time interval are shown.

Figure 4 shows the scatter diagram and empirical distribution for the same three time intervals, but limits the data points to fighter and attack type systems, again excluding prototypes, that have been developed since 1955. Again the empirical distribution has been assumed to be normal, and the mean and variance for each time interval are shown.

A Kolmogorow-Smirnov goodness-of-fit test was performed on the n=10 data points for Figure 4c, with the result that there is no statistical basis to reject the null hypothesis that the sample distribution is a normal distribution (D = .13).

As shown by Figure 4c, the A-10 weapons system development time appears to be representative of an approximately average weapons system acquisition time for fighter and attack type aircraft systems. And as stated in Chapter 1, fighter and attack type aircraft systems are also the most likely to be procured under a competitive prototyping strategy.

The time values used to develop the weapons system acquisition model were obtained from the history of the A-10 development maintained by the Aeronautical Systems Division

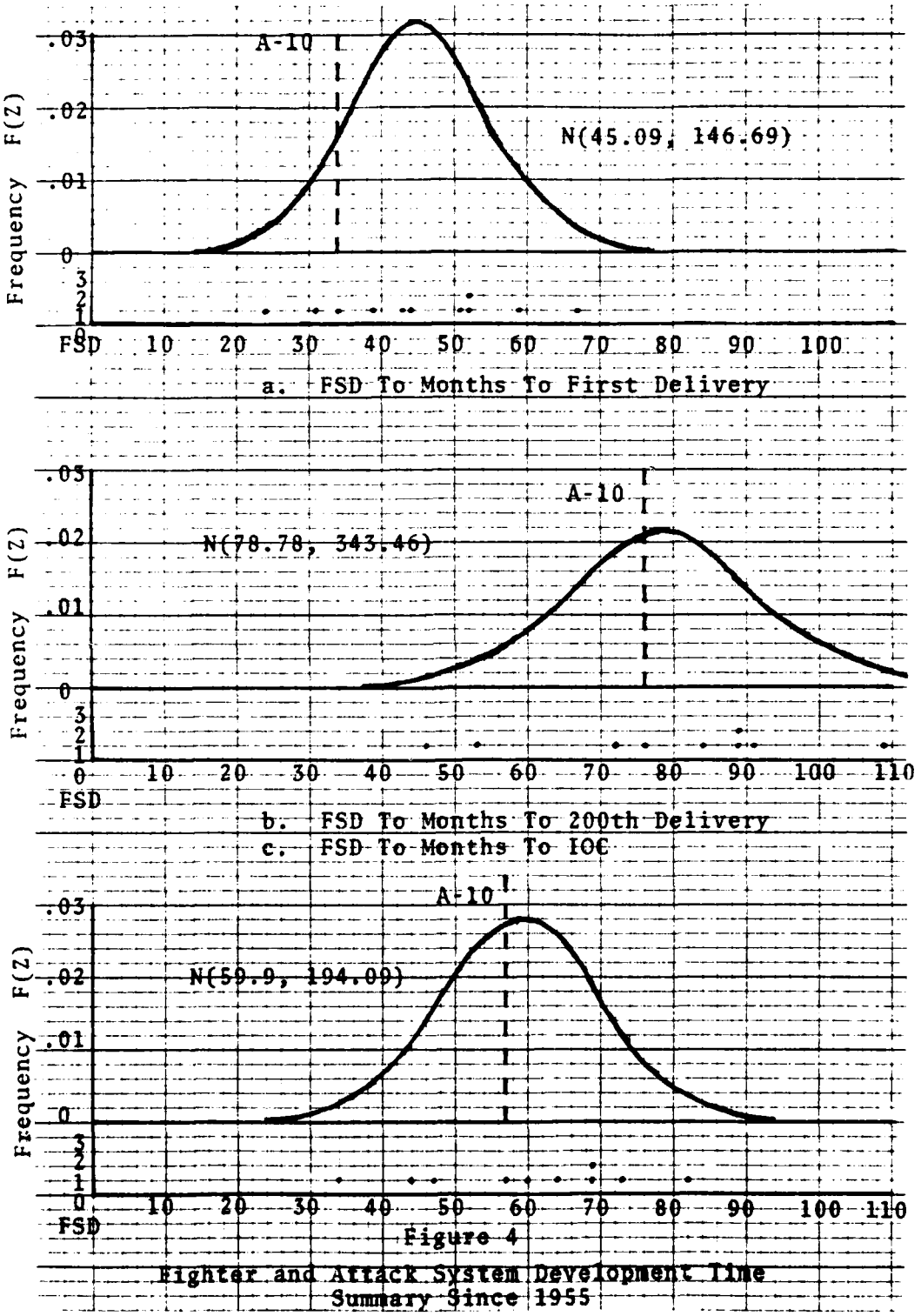


Figure 4

Fighter and Attack System Development Time Summary Since 1955

History Office at Wright-Patterson AFB, Ohio (28; 15; 22). This history contains the date of accomplishment of major milestones (events) during the A-10 development.

Logic relationships for the weapons system acquisition network model were developed from two sources. The logic relationships for activities in the phases of weapons system development prior to full-scale development contract award were derived from the network pattern displayed in Air Force Systems Command Pamphlet 800-3, A Guide For Program Management. Only key activities and interrelationships that clearly define the acquisition strategy in use, that capture important uncertainties, and that contribute to understanding the integration mechanism with the facilities acquisition network have been included.

The logic relationships for all activities subsequent to full-scale development contract award were derived from the network diagram developed by Fairchild Republic Company and used for overall system management during the A-10 acquisition (9).

As with the facilities acquisition network model, the weapons system acquisition model is at a higher level of aggregation than the constituent elements from which it is derived. The Fairchild Republic Company management network for the full-scale development and subsequent phases had 324 events designated, while the weapons system acquisition network model finally developed had only 117 events in total. This compression and aggregation was required to keep

unnecessary detail out of the network model, and to keep the model straightforward enough to readily identify important relationships and activities. Also, since this network model is also a constituent element of the integrated network model, the weapons system acquisition model could not be so large or so small as to obscure important relationships when the two subordinate models were integrated into one.

Each of the subordinate models was designed to capture the key interrelationships and activities for each acquisition process, and to capture those activities that are critical to the interface between the weapons system acquisition model and the facilities acquisition process model.

Finally, the weapons system acquisition network model was constrained to a ten-year calendar due to the requirements of the computer program used for analysis, and thus the early phases of planning and system definition that occurred prior to ten years before the IOC date were eliminated from the analysis. As a result of this time constraint, the beginning event for the weapons system acquisition network model is the re-orientation of the acquisition to a competitive prototyping strategy by the Secretary of the Air Force. Prior to this event, and not included in the network model, were detailed conceptual studies, mission analyses, and some contractor effort to determine different system alternatives for the mission need.

As in the facility acquisitien network model, data were input using the weeks and days format for time estimates.

The data input to the weapons system acquisition network model is shown in Appendix B.

Integrated System Acquisition Network

The facility acquisition network model and the weapons system acquisition network model constitute the primary input data for the integrated system acquisition network model. The interface activity time estimates and logic relationships between the two subordinate models, as well as the identification of the interface activities themselves and their tie-in points, were determined from the files of the Aeronautical Systems Division Civil Engineering Office, Systems Facilities Branch, and from personal interviews with personnel from that office.

No new events were added to those already existing in the two subordinate and constituent network models. Various activities were added between the existing events to integrate the two models into one. The input data for the integration activities followed the same format as used in the preceding model developments. Time estimates were input as weeks and days, and all input data are shown in Appendix C.

Discussion of the three model networks, and the associated logic diagrams for each, is reserved for the next two chapters.

CHAPTER 4

ANALYSIS

This chapter will present the analysis of each of the three model networks, in turn. The analysis will examine the logic diagram developed for each of the three networks, identify the critical path in each network logic diagram, and examine the sensitivity of the critical path in each network. The sensitivity of the critical path in each network will be examined with a view as to what it takes to get a new critical path.

To a limited extent, the sensitivity of individual activities to duration changes will be examined. The vehicle for this examination will be the variance of each activity as determined from the beta distribution for each activity. Because only activities in the facility acquisition network and integrating activities between the facility acquisition network and the weapons system acquisition network have the three time estimates necessary to compute a variance, only they will be examined for sensitivity to change in individual activities.

For those activities for which a variance has been computed, the probability of each activity being completed by the scheduled date (or the latest allowable date if a scheduled completion date is not specified) will be examined. Special attention will be accorded to those activities with a low

probability of accomplishment.

Facility Acquisition Network Model Analysis

The computer-generated portion of the analysis of the facility acquisition network model is given in Appendix D. The discussion and analysis of the facilities acquisition network presented in this chapter is based on that computer analysis, but will only address salient elements of the detailed analysis of Appendix D. The reader is referred to Appendix D for the detailed calculations for each activity and event in the network.

The facility acquisition network model construction and analysis was based on the assumptions given in Chapter 1. Additionally, a beginning date for the network was chosen that would provide an easily recognizable benchmark and that would allow direct comparison with the stand-alone weapons system acquisition network model. The beginning date of 15 January 1973 was chosen for the dummy start date for the network and does not imply that all facility acquisitions start in January or any other month. Requirements for new facilities can be generated and the programming cycle initiated at any time.

A number of required dates are associated with the facilities acquisition network model. These required dates denote deadlines that must be met for the annual MCP submittal, and are levied by the MAJCOM, HQ USAF, Office of the Secretary of Defense (OSD), and Congress to assure sufficient review and program selection time at each review level. For instance,

the MCP program must be submitted to Congress on the 15th of January in the year it is programmed (1975 for this study). OSD requires the MCP program by the preceding October (October 1974), and HQ USAF requires the full project books for the MCP program in the preceding August (August 1974). The MAJCOM, in turn, requires the full project book (PB) one month earlier (July 1974). The abbreviated project book must be submitted to the MAJCOM by the preceding November (November 1973). The initial DD Form 1391 must be received by HQ USAF in October of that same year (October 1973), and the same document must be submitted to the MAJCOM two months earlier (August 1973).

The activities and events enumerated in Appendix A are shown graphically in Figure 5 as a logic diagram. The minimum slack, or critical, path is identified by the doubled activity line. Only the event numbers are shown in Figure 5, but cross-referencing the event numbers with the activity and event descriptions given in Appendix A identifies the critical path as being the programming and approval process, including the Congressional authorization and appropriation. Specifically, the critical path follows the development of the initial DD Form 1391 submission, through the MAJCOM and HQ USAF reviews, and the inclusion of the facility requirement in the POM. The critical path continues through the OSD and Office of Management and Budget (OMB) review process into the Congressional authorization and funding. After Congressional and Presidential approval of the MCP, the critical path continues through

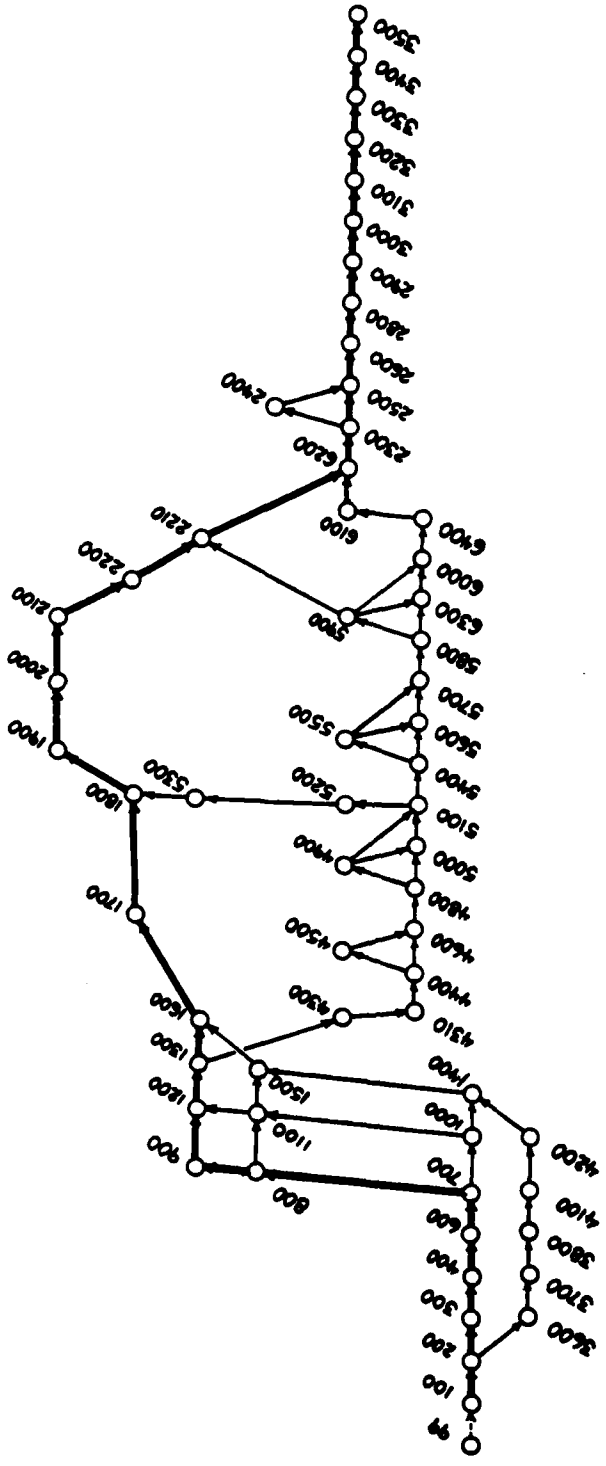


Figure 5

Facility Acquisition Process Network Logic Diagram

the funds disbursement process and culminates in facility construction, inspection, and equipment installation.

The abbreviated PB development process has a minimum slack of seven weeks, as does the full PB development. The abbreviated PB review at MAJCOM and HQ USAF does allow for issuance of the design instruction with 13.7 weeks of slack, however.

The environmental impact analysis process, events 3600 through 4200, when constrainted as given in Chapter 1, has 44.5 weeks of slack, and thus could not create a new critical path unless that slack is eliminated.

More importantly, the design process, events 4300 through 6400, has only 13.7 weeks of slack to meet the requirements of 35 percent design before the project will be submitted for Congressional funding and approval. After the 35 percent design milestone, slack increases in the design process to 16.8 weeks. While 13.7 to 16.8 weeks of slack may seem to be a long time, the design process can slip this amount if there is very much lost design. Lost design is that design effort that is wasted because of changes in requirements or changes to specifications that require a redesign effort. The standard deviation for the design process as a whole is 2.18 weeks, which was obtained by taking the square root of the sum of the variances along the longest expected path from event 4310 to event 6400.

The duration of the critical path in the facility acquisition network model is five years, five and one-half

months. The IOC date for the facility in this model is in June 1978, given the network start date as January 1973.

Turning now to the amount of change in individual activities, the variance for all but eight activities in the facilities network is less than one week. The maximum individual activity variance is 3.61 $week^2$ for the POM preparation by HQ USAF. Interestingly, the complete project book preparation variance is close to this maximum at 2.89 $week^2$. The facility construction variance is 1.69 $week^2$, as is the variance in collecting comments from the preliminary design conference. The programming phase of the facility acquisition process contains the most variance in individual activities. As can be seen from the critical path, any change in the programming phase directly impacts the critical path and the total project duration.

The probability of individual activities being accomplished by the scheduled date (or the latest allowed date if a scheduled date is not specified) is also of interest in the facility acquisition network. The probability for each activity along the critical path is .50, while the probability of accomplishment for those activities with slack increases commensurate with the amount of slack available, up to a maximum probability of .99. There is no probability given in the stand-alone facility acquisition network model of less than .50.

One further point about the probabilities of individual activities. For those activities on the critical path

and for which a required or scheduled date has been specified, the expected date for accomplishment of that activity occurs sufficiently before the required or scheduled date to allow a .99 probability of completion. This implies that the required or scheduled dates may have excess slack "built-in" beyond what is necessary for any single project. However, it must also be recognized that in any given fiscal year program, there are many hundreds of projects submitted and all are processed and reviewed subject to the same required and scheduled date constraints.

A probability distribution for the facility acquisition network as a whole is shown in Figure 6. This distribution is for the time duration from when the requirement is identified until the facility is complete and ready for use, including the installation and checkout of any required equipment. Also, it is predicated upon the same assumptions applicable to the facility acquisition model development. The distribution in Figure 6 was determined by summing the expected activity duration values (t_e) of individual activities along the critical path of the facility acquisition network to determine $\bar{X}$, and using the formula:

$$\sigma_{T_E} = \sqrt{\Sigma(\sigma_{t_e})^2}$$

where σ_{T_E} is the standard deviation of the network as a whole and $(\sigma_{t_e})^2$ is the variance for each individual activity along the critical path. The values of T_E and (σ_{t_e}) for each

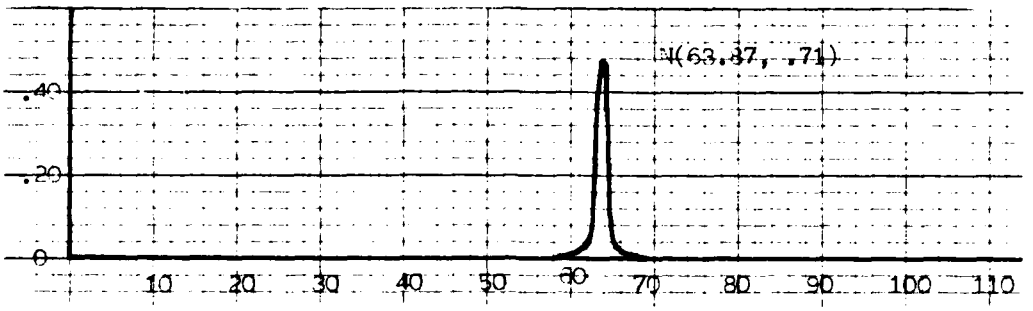


Figure 6

Facility Acquisition Process
Probability Distribution

activity in the network are shown in Appendix D.

Weapons System Acquisition Network Model Analysis

The computer-generated portion of the analysis of the weapons system acquisition network model is given in Appendix E. The discussion and analysis of the weapons system acquisition network, as with the facility acquisition network, is based on that computer analysis. Again, only salient elements of the detailed analysis of Appendix E will be addressed. The reader is again referred to Appendix E for the detailed calculations for each activity and event in the weapons system acquisition network.

As with the facility acquisition model, only the initial network start event was specified in the analysis as an accomplished date. All other dates in the analysis were calculated as expected dates. The expected dates shown in Appendix E are, in fact, close approximations to the actual

dates that that event or activity was accomplished, but because the computer program used for analysis was not designed to analyze already completed activities and events, it was necessary to modify the way the data were input and not denote them as actual dates to allow eventual analysis of the integrated network. Thus, the dates specified as the expected dates are, in fact, close approximations to the actual dates, even though they are not so annotated in the computer-generated output.

The designated network start date was October 10, 1969, which is the date the Secretary of the Air Force redesignated the program into a competitive prototyping strategy.

Figure 7 shows the network logic diagram for the A-10 system development, as constructed from the activities and events of Appendix B. Again, the critical path is shown by a doubled activity line. As with Figure 5, only event numbers are shown in the logic diagram, and these must be cross-referenced with Appendix B to determine activity and event descriptions.

The duration of the critical path in the weapons system acquisition network is eight years, given the start date already noted, with the IOC declared for the A-10 in mid-October, 1977. Another important date to note is the date of the decision to proceed into full-scale development, January 1973. This is the same month that was used as the start date for the stand-alone facility acquisition network.

The critical path involves the PMD development and finalization, DSARC I, the selection and fabrication of the

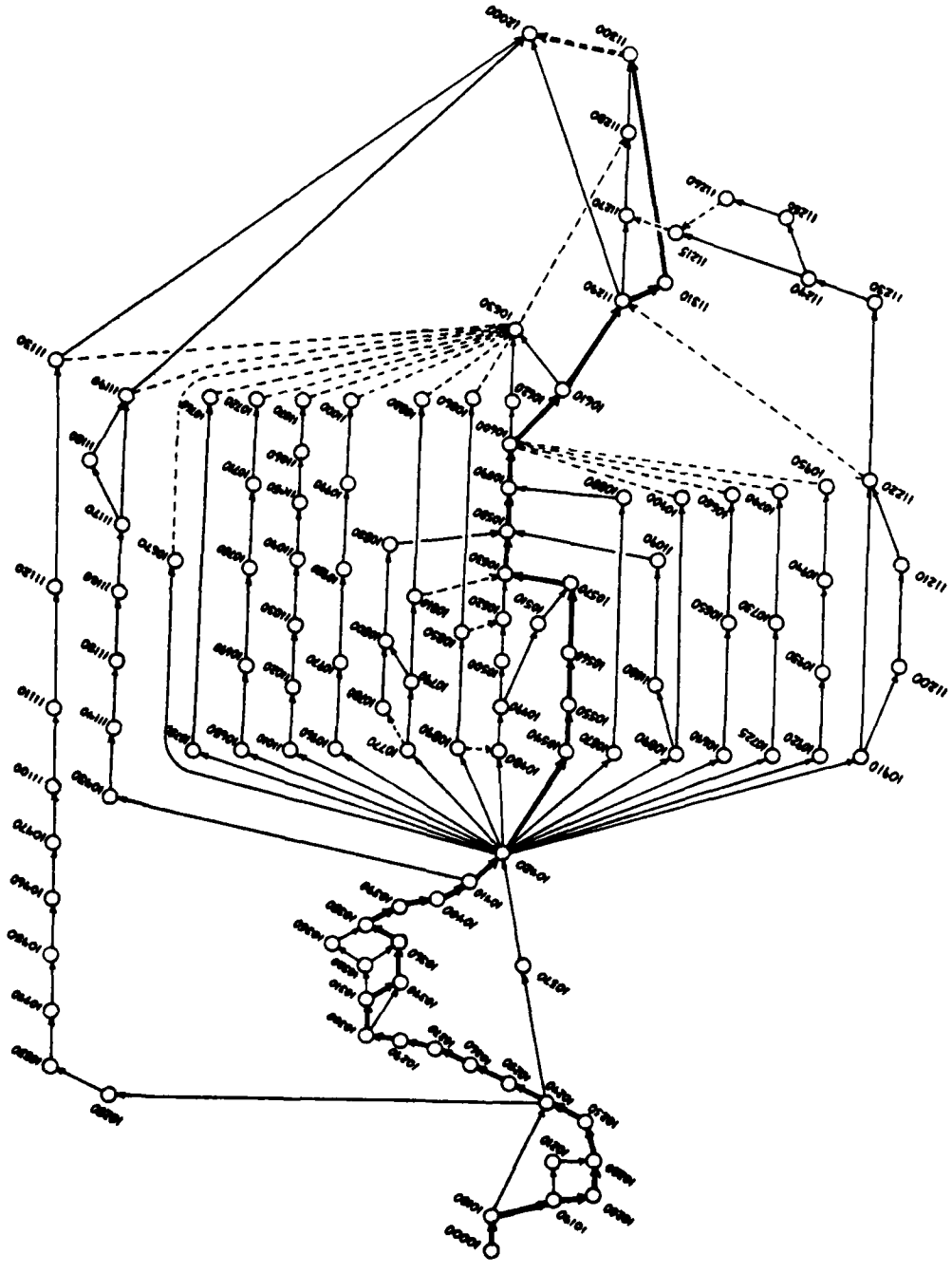


Figure 7
Weapons System Acquisition Process Network Logic Diagram

competing prototypes, the flyoff and evaluation of the prototypes, the DSARC II to the final prototype selection. In the FSD phase, the critical path follows through contract award, into tool planning, design, and manufacture for the pre-production prototypes, and into final assembly and construction of the pre-production prototypes. After the DSARC IIIA decision for initial production, the critical path continues through aircraft production and on to equipping test and training units, then equipping the first operational unit to meet the IOC.

Prior to the award of the FSD contract, all activity slacks are very close to zero, and thus even small changes in activity durations could alter the critical path.

After the award of the FSD contract, there are many activity paths that have little slack and could change the critical path if there are excessive delays or rework required. Among them are the release of specifications for vendor-supplied items, the finalization of the aircraft design, including the release of structural drawings and the design of jigs and final plans. Other activity paths with little slack include the gun and avionics testing, as well as the contract monitoring and planning that is done by the SPO. Finally, the initial aircraft delivery, test and DT&E, and initial operational cadre training are also very close to the critical path and could force it to change with any significant delays in any of these activities.

It must be noted that the description of the

sensitivity of alternative paths through the network to becoming the critical path is somewhat tenuous because actual dates are used. In some of these "near critical" paths, the durations for individual activities could have been intentionally lengthened up to the available time for their completion. If this is true, the calculated slack values are questionable.

Because the variance for individual activities in the weapons system acquisition network were not computed, the sensitivity of individual activities to change is impossible to determine.

Figures 4a, 4b, and 4c presented in Chapter 3 show the estimated overall probability distribution for total development times of fighter and attack weapons systems developed in the recent past.

Integrated Acquisition System Model Analysis

The facility acquisition network probability distribution shown in Figure 6, when compared with the distribution for the weapons system shown by Figure 4c, offers a convenient starting point for analysis of the integrated acquisition system. But since the facility acquisition network probability distribution of Figure 6 was based on the requirement identification at base level as its starting point, it does not share the same starting milestone as does Figure 4c, the weapons system process probability distribution from FSD to IOC. The facility acquisition process can be expanded to begin at the FSD decision point, however, by adding one

integrating activity and determining the optimistic and pessimistic time estimates for the time interval between the decision to proceed into full-scale development and the actual contract award for FSD pre-production prototypes. This was done by adding the contractor preparation of the facility requirements report activity and by having an expert in weapons system development provide estimates for the optimistic and pessimistic times for activity 10410-10420, the final contract negotiations between the announcement of the FSD decision and the competition winner and the signature of the FSD contract with the winner (21). (The three time estimates for these two activities are shown in Appendix C.) The resulting probability distribution for the facility acquisition process starting from the FSD decision is shown in Figure 8.

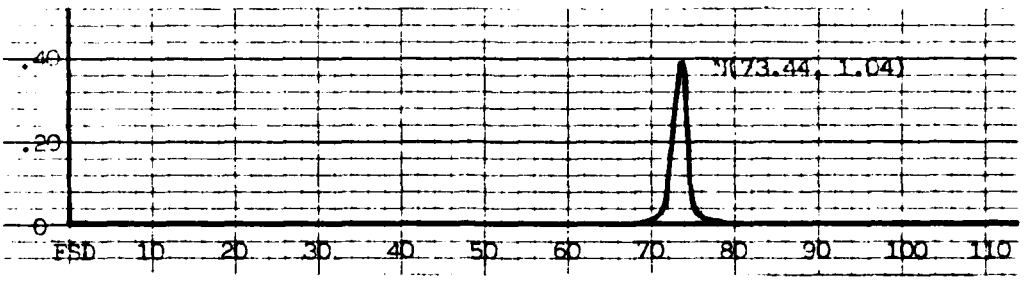


Figure 8

Amended Facility Acquisition Process
Probability Distribution

When Figure 4c is overlaid on Figure 8, as is shown in Figure 9, the difference between the expected durations of the two acquisition processes is apparent, and it is evident

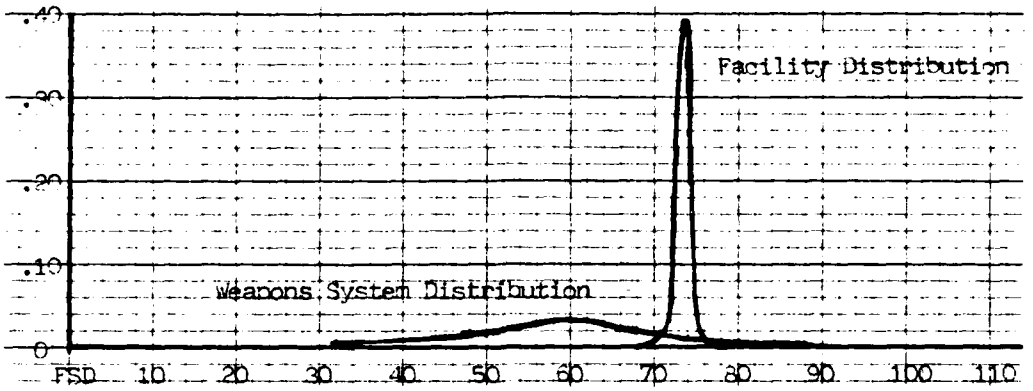


Figure 9

Comparative Probability Distributions

that the two processes are not syncronous. Figure 9 shows that the facility acquisition process, under normal procedures when funding is obtained through the MCP, is not compatible with the weapons system acquisition process if both have to meet a common IOC.

But the question then arises as to what activities can be crashed or otherwise amended so as to make the two processes' probability distributions more syncronous? A detailed discussion of the answer to this question will be deferred to the next chapter, but the integrated acquisition system network, using the A-10 as the representative system for the weapons system acquisition process under a competitive prototyping strategy, can allow investigation into what can be done. First it is necessary to investigate the integrated network as it results from the combining of the facilities acquisition network and the weapons system acquisition

network when no special actions on any activities or events are allowed.

A computer analysis of the integrated network is included in Appendix F. Three separate analyses of the integrated network were performed to assess the influence of the required and scheduled dates inherent in the facility acquisition process procedures. These will be discussed in more depth below.

First, it is necessary to discuss the integrating activities between the facilities acquisition process and the weapons system acquisition process. There are essentially four areas where the two processes interface directly, the first being the contractual requirement of the weapons system prime contractor to supply a facility requirements report identifying the real property facility requirements needed to support the new weapons system entering FSD. This report is normally initially required 180 days after the FSD contract is awarded, and is periodically updated to reflect weapon system design refinements that change facility requirements.

The second main interface between the two acquisition processes reflects the fact that the weapons system design must be finalized before the supporting facility design can be finalized.

Third, the site activation task force (SATAF) facilities sub-committee works concurrently with base, MAJCOM, AFRCE, and SPO personnel to minimize problems in the final stages of facility construction and equipment installation to insure

that all constituent elements necessary to become operationally capable come together at the same time. The SATAF facilities subcommittee is a controlling and coordinating body organized to facilitate a smoother weapon system beddown.

The fourth and final interface is related to a basic assumption of this study, and that is that the facility must be usable before the operational unit can be considered to have reached an initial operational capability.

A logic diagram for the integrated acquisition process is shown in Figure 10. The integrating activities, in the order they were described above, are 10420-100, 10500-6000 (the black square denotes the activity arrow has been broken and is continued elsewhere), 11310-2900, and 3500-11300. The critical path for the integrated network is shown by the doubled activity lines, and was the same path in all three analyses completed. The time duration characteristics of the three analyses differed significantly, however, and need to be addressed separately and in more detail.

The first analysis, included as Appendix F, was based on the facility acquisition network model, including all required and scheduled dates as given in the stand-alone facility acquisition network model. Two significant results are shown by this analysis. The first is that the duration of the critical path, based on the same start date used in the stand-alone weapons system acquisition model analysis, has increased the expected date of the IOC to late February 1979, an increase of one year and four months from the IOC in the

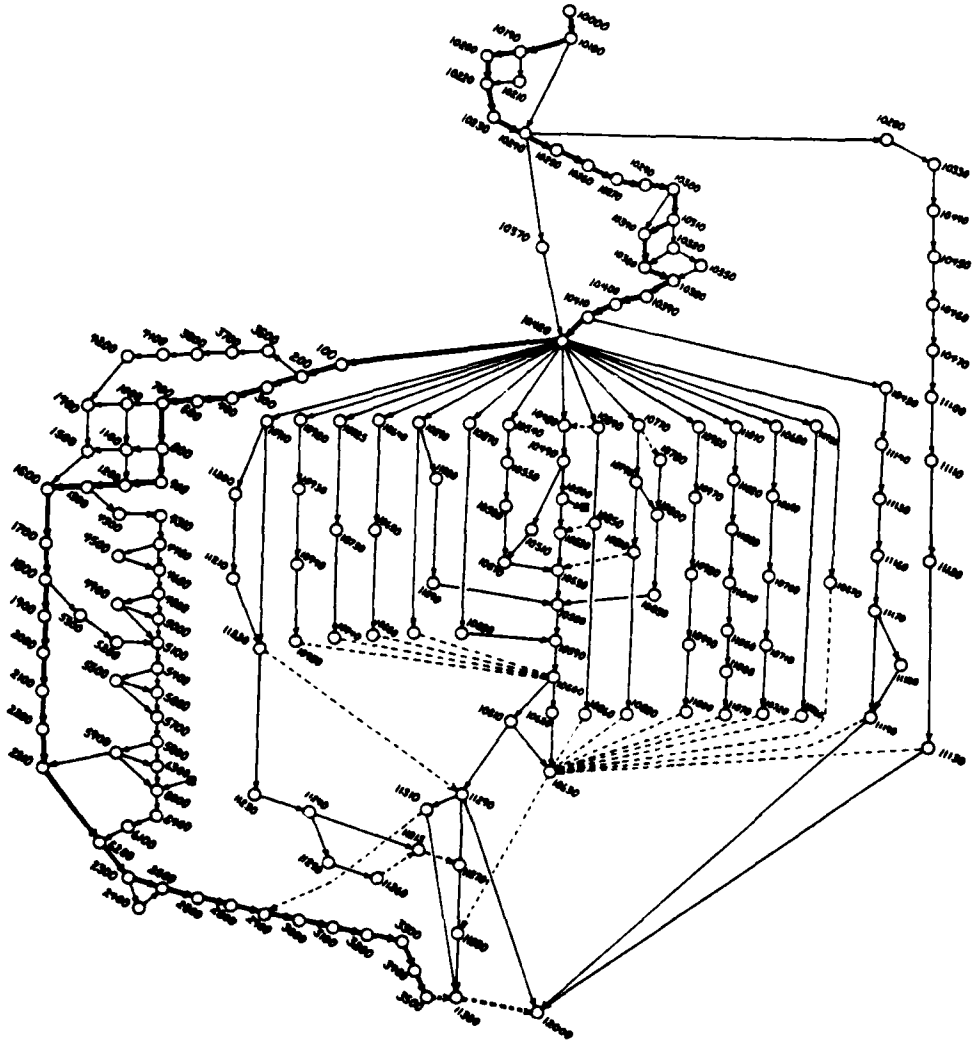


Figure 10

Integrated Acquisition Processes Logic Diagram

NOTE: The black square indicates the activity line has been interrupted for that activity and it is continued where the other black square is located.

stand-alone weapons system acquisition network model.

The second significant result is the negative slack calculated for all activities on the critical path, or even fairly close to it, prior to the required date the MCP program for the facility acquisition is sent to Congress. A negative slack means the latest allowable date for completion of an activity is before the expected date for completion of the same activity. Put another way, it means that the activity should be completed before it can reasonably be expected to be completed. In this case, the maximum negative slack has a value of -27.8 weeks, or approximately six months, and occurs for each activity on the critical path prior to event 1700, MCP program submission to Congress. This large negative slack infers that either the events prior to when the MCP program is sent to Congress should be initiated six months earlier or the fiscal year program in which the facilities are to be acquired should be moved back one year, in this case from FY 1975 to FY 1976. Moving the program back will necessarily delay the IOC by six more months, however, since the program submission to Congress is on the critical path.

The sensitivity of the critical path in this integrated network analysis is essentially the same as that in each stand-alone network previously discussed, except at the juncture where the facilities subnetwork breaks off from the weapons system subnetwork. The slack prior to event 10420, FSD contract award, is -27.8 weeks along the critical path. After event 10420, and within the weapons system subnetwork,

the lowest slack is 68.4 weeks.

Clearly the facility acquisition process is a binding constraint when new facilities are required before a weapons system can be declared operationally capable.

Finally, it is worthwhile to note that for those activities prior to MCP program submission to Congress and on the critical path, the probability of each activity on the critical path being completed by the required date is approximately .01.

The second integrated activity network analysis was based on the same input data as that included for the analysis described above, except that only the date the MCP program was sent to Congress was retained as a required date. The constraints on all other required dates as specified in the stand-alone facilities acquisition analysis were relaxed, since for some special, high priority requirements, these time constraints can be waived.

Essentially the same findings as those presented in the preceding analysis were revealed. The only difference was that the most negative slack was reduced to -24.4 weeks. The total duration and route of the critical path was not reduced or changed, and there was only 3.4 weeks reduction in the sensitivity of any paths through the weapons system acquisition subnetwork becoming part of the critical path.

The third integrated activity network analysis used the same input data as the first integrated analysis, but eliminated any required or scheduled dates. This was done

solely to allow analysis of an unconstrained acquisition process to identify any significant changes and does not reflect a real situation or real conditions. Again the same critical path, and the same total duration of the critical path was found as in the previous two analyses. The negative slack was eliminated, and all activities on the critical path that had had a negative slack had a different latest allowable date calculated. The expected and latest allowable dates for MCP program submittal to Congress, for instance, occurred in July 1975, which was six months out of phase with the actual requirement as has been previously noted.

Under all three analyses, the "tie-in" points of the interface activities was not changed, and no possibility of activity crashing was input into the computer analyses. This posture was maintained to provide as realistic a picture as possible of the way the normal structure and procedure of the acquisition processes now are designed to interface with each other.

The analysis of the acquisition networks in this chapter has shown the incompatibility between the normal procedure of the facilities acquisition process and the weapons system acquisition process. The next chapter will examine how that incompatibility is currently resolved, and analyze some other alternatives for resolving the incompatibility.

CHAPTER 5

ANALYSIS OF ALTERNATIVES

Acquainted now with the structure, time duration, and other characteristics of the facility acquisition model, the weapons system acquisition model, and the integrated systems model, it is worthwhile to examine some alternative means whereby the IOC for facility completion in the integrated model can be made essentially equivalent to the IOC in the stand-alone weapons system acquisition model. This involves either a compression or re-orientation of the facilities acquisition model (based on the assumption that the weapons system is to be operationally capable as soon as possible), because the critical path in the integrated model proceeds through the facility acquisition model subnetwork and extends the IOC beyond what actually occurred.

Essentially, there are three basic alternatives available to make the expected duration through the facility acquisition process equal to the expected duration from FSD start to IOC in the weapons system acquisition process. The first alternative, and the one currently employed, is to crash activities in the facility acquisition network. A second alternative is to restructure the integration points between the facility acquisition process and the weapons system acquisition process. This alternative also implies some

restructuring of the facility acquisition process. The third alternative is to completely restructure the facility acquisition process and make it subordinated to, and under the control of, the weapons system program manager.

The first two alternatives will be discussed in further detail, but the third alternative listed is beyond the scope of this study, since it involves very strong political interests as reflected in the close Congressional control exerted over the military construction program. Also, there are many facility construction projects funded through the MCP that are not tied to any particular weapons system beddown.

Crashing the Facility Acquisition Process Model

This analysis will show how the facility acquisition subnetwork must be compressed, or crashed, to allow the IOC established in the stand-alone weapons system acquisition model to be achieved in the integrated acquisition model.

Before discussing the crashed facility acquisition network model, it is necessary to discuss briefly the approach used to define crashed activities. "Crashing" involves developing a new plan, one in which the assumed work pace is accelerated. This is accomplished by procuring added equipment and more personnel, working overtime, scheduling concurrently whenever possible, etc. Crashing an activity generates a new and different probability distribution from the beta

distribution for an uncrashed activity. For analytical purposes in this study, however, the expected value of the crashed activity distribution has been assumed to be equal to the most optimistic time estimate given in the beta distribution for an uncrashed activity. This assumption was made because the crashed activity distribution was not available for each activity in the facility acquisition network.

The first step in crashing the facility acquisition process, for this analysis, involved crashing all activity times for events along the critical path of the facilities acquisition subnetwork, to the most optimistic completion time as given by the three time estimates defining the beta distribution for each activity. Even this crashing did not reduce the total duration of the facilities acquisition process sufficiently to allow either the program to be presented to Congress by the required date or for the facility to be ready for use by the required IOC. Further crashing was necessary in both the programming phase and in the construction phase.

Specifically, in the programming and approval phase of the facility acquisition process, the only truly firm required date is the date the program is sent to Congress. According to one source on the HQ USAF staff, new programs can be submitted to HQ USAF as late as December and have them included in the January budget submission that goes to Congress. However, the program must be in the POM, and must be coordinated with all other funding accounts (18). Also according to the same source, such severe compression of the normal

headquarters review and selection process is not uncommon for high priority facility projects, such as those associated with a new weapons system beddown.

Not only must activities prior to submission of the program to Congress be extraordinarily crashed, but activities in the construction phase, especially the facility construction itself, must be extraordinarily crashed. Extraordinary crashing refers to a crash time that is less than the optimistic time estimate from the beta distribution for an uncrashed activity. This extraordinary crashing is done in the construction phase through contractual requirements, but adds costs that the building contractor passes on the government in his bid price (23).

The result of crashing the critical path in the facilities subnetwork, and of extraordinary crashing elements of the programming and construction phases, is shown in Figure 11, a revised logic diagram for the facilities acquisition subnetwork, and are tabulated for each activity in the integrated network in Appendix G.

As can be seen from Figure 11, where all the critical paths are shown by doubled activity lines, the result of all this crashing is a network with multiple critical paths. While the generation of multiple critical paths reduces the total process duration, it also increases management complexity. Further, slippage along any of the critical paths will delay the whole process. Multiple critical paths also serve to diffuse management attention over many simultaneous

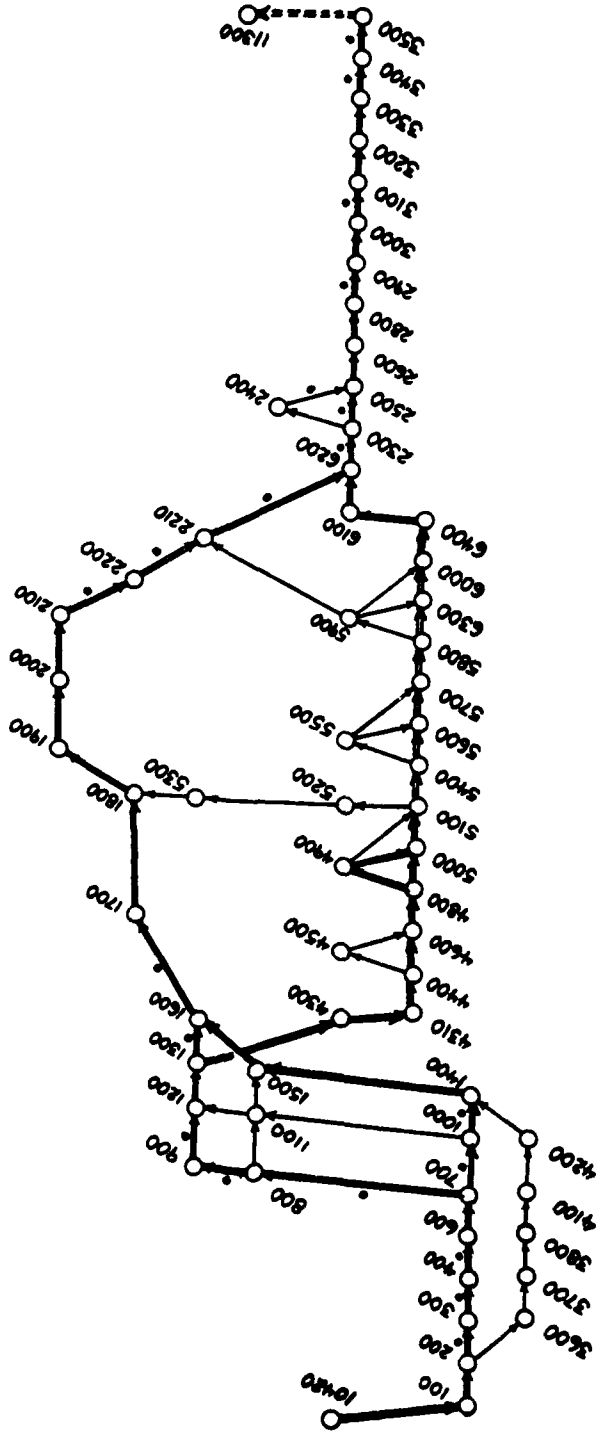


Figure 11

Facilities Acquisition Subnetwork Revised Logic Diagram

NOTE: A dot above the activity line denotes crashed activities.

activities, instead of allowing management to focus on a few key specific activities along one critical path. In effect, multiple critical paths takes away from management the option of management by exception (4:19).

There is also higher risk, and the associated higher cost, inherent in multiple crashed critical paths. The opportunity is greater for some important function or activity to be less than the best product in order to meet the rigorous schedule demands. For facility projects, this equates to a higher risk of inadequate programming, higher risk of lost or incomplete design, and higher risk of insufficient funding level estimates and funding appropriations.

As mentioned earlier, crashing activities is the method of facility acquisition process compression used now. All of the hazards associated with this approach, as mentioned above, have been experienced in actual practice (23). Crashing activities in the facilities acquisition process was the method employed in meeting the A-10 IOC.

Restructure Integration Points

The second option for compressing the facility acquisition process is to restructure the integration points between the weapons system acquisition process and the facility acquisition process. To analyze this option, it is first necessary to more fully understand the facility acquisition process programming phase.

The facility acquisition process programming phase

has two essential functions. The first function, accomplished through the initial DD Form 1391 submission, is to provide a line item input into higher command level budget planning. This input is used to allow the MAJCOMs and HQ USAF an opportunity to initially review and select from among the projects submitted those that will be supported for that fiscal year MCP program. For high priority projects, such as new weapons system beddowns, the initial DD Form 1391 submittal establishes a budget planning figure for development of the POM, and it serves as the paperwork record in high level reviews.

The second input from base level in the programming phase is the abbreviated project book. This document further refines the facility construction cost estimates and provides further information for review to allow final selection of those projects that will be supported further through the process.

The final base-level product from the programming phase is the complete project book (PB). This document provides detailed cost estimates, and all baseline information from which to develop the facility design. It also serves as the final document in the higher headquarters review and approval process, especially before Congress.

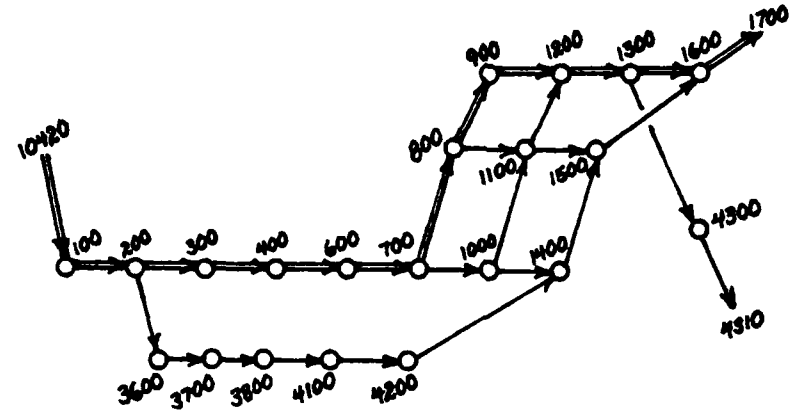
Essentially, however, the first two documents serve as inputs for review, approval, and selection of projects that will be included in the POM. The last document serves as the baseline for design, and for support of those projects in the POM that are being defended before Congress for authorization

and funding.

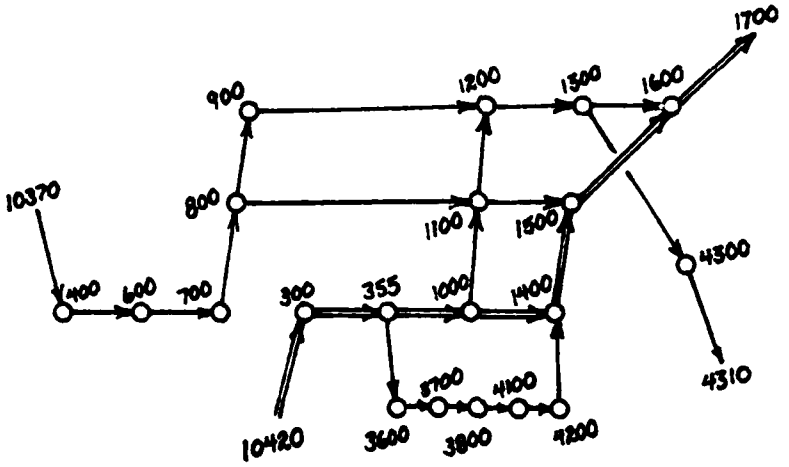
The option for restructuring and "tie-in" points of the integrating activities between the two acquisition processes stems from the fact that the first programming document, the initial DD Form 1391 submittal is not dependent on receipt of the facilities requirements report developed by the weapon system prime contractor. What is needed is notification of the intent to beddown a weapons system at a particular base, so that that base can generate an initial DD Form 1391 input to establish the requirement in the POM. The initial estimate of the amount of money necessary for the facility support of the weapons system beddown need not be precisely accurate since it can be refined with inputs from the later programming documents and finalized before the whole MCP program is submitted to Congress.

Figure 12 shows the original and an amended subnetwork of the programming phase of the integrated acquisition network. The location of the critical path of the whole integrated acquisition network as it passes through each of these subnetworks is shown by the doubled activity line. The computer analysis of each activity in the integrated acquisition network, when it is restructured as shown in Figure 12b is also included as Appendix H.

In the structure shown by Figure 12b, notification of intent to beddown a weapons system would be made concurrent with the SPO's direction to competing contractors concerning the requirements of the full-scale development phase. This



a. Original Programming Phase Subnetwork



b. Amended Programming Phase Subnetowrk

Figure 12

Programming Phase Subnetworks

early notification would allow early submittal of the initial DD Form 1391, and get the construction program (although not the specific required amount) identified as early as possible in the POM. If the operating command for the weapons system had not yet designated an initial host base, the MAJCOM could initiate DD Form 1391 to insure the program inclusion in the POM.

Some rearrangement of activities from the way they exist in Figure 12a is shown by Figure 12b, but no essential activities have been eliminated. They have only been re-sequenced in a different structure. The computer analysis of this amended structure shows that without crashing any of the programming phase activities, there is only seven weeks of negative slack in the network. All negative slack could be eliminated by crashing the abbreviated and complete project book preparation activities, and even then they would not have to be crashed beyond a time duration equal to the most optimistic completion time for the uncrashed activity.

This network structure also results in only one critical path, allowing management to focus control more precisely and permitting management by exception.

The network structure shown by Figure 12b does not preclude the crashing or extraordinary crashing of activities in the construction phase. It does provide some valuable slack in the design phase, however. Finally, the network structure of Figure 12b still provides the opportunity to stop the facility support project in support of the weapons system

beddown if the weapons system development does not proceed into full-scale development or does not proceed into production.

The structure of the logic diagram of Figure 12b represents only one possibility for relocating the "tie-in" points for integrating activities between the two acquisition subnetworks. Five other possible integrating structures for the programming phase of the network were examined, but they all resulted in more negative slack or required crashing more activities than the one shown, and were thus considered less acceptable than that shown by Figure 12b. This is not to imply that the modified structure shown in Figure 12b is the optimum one possible. More "what if" type analyses of different structural arrangements is necessary to determine the optimal structure that will meet requirements. What is shown is that restructuring can effect better management procedures than the present method of crashing allows.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

The development and analysis of the facility acquisition process and the weapons system acquisition process has been accomplished through the use of PERT networks developed for each process. From the analysis of the stand-alone acquisition processes, an analysis of the compatibility of the two processes was accomplished.

The first steps in the analysis consisted of developing probability distributions for each acquisition process, as they are normally structured and occur. Comparison between the probability distributions showed a marked expected time duration difference between the two acquisition processes, with the expected value of the facility acquisition process being many months longer than the expected value of the weapons system acquisition process, when both are measured from the decision to proceed into full-scale development. (The difference between means is 13 months.)

The second step in the analysis used the network models developed for each acquisition process as inputs into an integrated acquisition process model. This permitted the specific requirements of each subordinate acquisition process to be analyzed in the context of how it impacted the acquisition process as a whole. The integrated network also allowed

analysis of how the two subordinate acquisition processes might be restructured, or their integration structure reoriented to more acceptably meet the time constraints imposed on the whole system.

Conclusions

From this analysis, it was determined that the facility acquisition process is very likely to be a binding constraint on the initial operational capability date established for a new weapons system development. The normal procedures and time tables used in the facility acquisition process are not conducive to meeting the targeted IOC. Instead, extraordinary management action is required to crash activities in the facility acquisition process, to the point where almost all activities in the facilities acquisition process become critical.

Restructuring the interface activities between the facility acquisition process and the weapons system acquisition process was examined with a view to establishing different "tie-in" points between the two processes. Analysis of this restructuring showed that it can reduce the amount of crashing required in the facility acquisition process, thus reducing extraordinary management control and saving resources. An example of a restructured network was shown in Figure 12b of Chapter 5.

Recommendations

While the structure of the facilities acquisition process in support of new weapons system beddowns shown in

Figure 12 may not be optimal, it does illustrate that restructuring the process can achieve economies of time and other resources. More study into the relocation of integrating activities between the two acquisition processes is necessary, and this research should be pursued. The benefits possible from finding the optimal structure for integration include a lower risk of exceeding time constraints, lower cost, less direct management attention, and less stringent management control.

Recommendations for Further Study

One area requiring further study is the possible development of a generalized weapons system acquisition model that does not rely upon a particular weapons system as the basis for analysis. The case study approach, as used in this analysis by having the A-10 system as the weapons system acquisition process model, does not give generalized results that can be universally applied.

The specific problems of coordination and responsibility assignment that would be encountered by restructuring the programming phase of the facilities acquisition process need further investigation, as does determination of the optimum structure to be used.

Finally, repeated validation of the results of this study are necessary because of the subjective nature of the input data used as the foundation of this study. Subjective judgments of time estimates could have inherent biases built

in that could be eliminated only by repeating the study and acquiring inputs for time estimates from different sources than were used in this study.

APPENDIX A

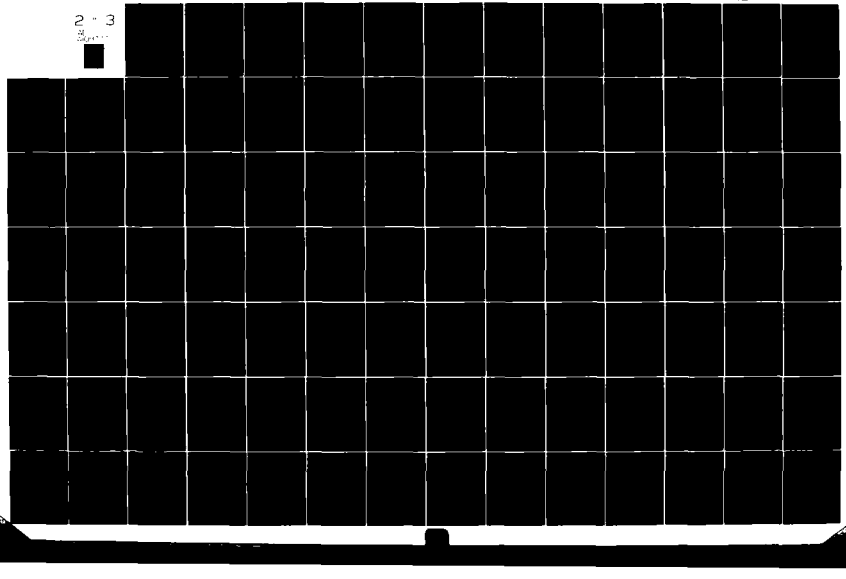
FACILITY ACQUISITION MODEL INPUT DATA

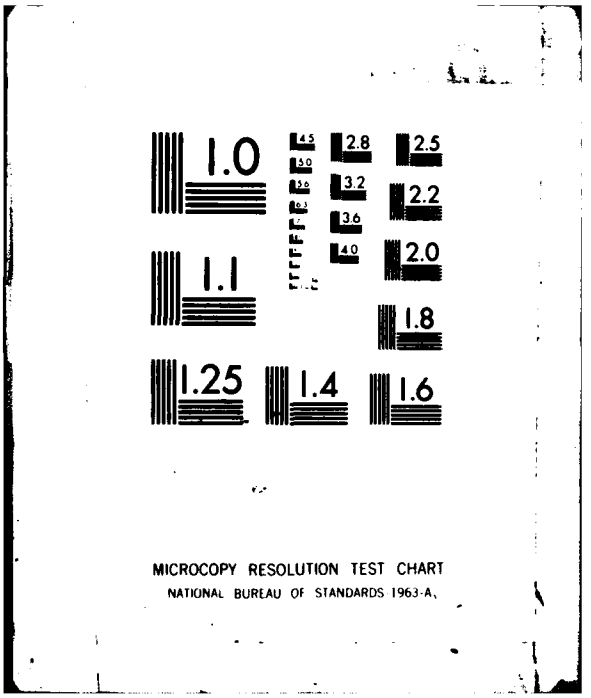
Activities Input Data

Note: Times are given in weeks and days format.

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
99	100	Dummy Network Start	0	0	0
100	200	Facility Requirements Sent to Base	3	5	10
200	300	Facility Survey	42	42	60
200	3600	Initial Environmental Evaluation	26	42	63
300	400	Construction Program Determination	34	42	55
400	600	Initial Documentation Development	5	26	55
600	700	Initial DD Form 1391 Development	3	5	10
700	800	1391 Receipt and Review by MAJCOM	42	63	84
700	1000	Abbreviated PB Development	142	171	213
800	900	Program Amendment & Forward to HQ USAF	84	105	121
900	1200	Program Review by HQ USAF	105	126	171
1200	1300	Approved Program Selection by HQ USAF	21	26	42
1300	1600	POM Establishment by HQ USAF	171	213	284
800	1100	MAJCOM Review of 1391	26	42	55
1100	1500	MAJCOM Review of Abbreviated PB	105	126	150
1000	1100	Abbreviated PB Mailed to MAJCOM	3	5	10
1000	1400	Complete PB Preparation	213	255	321
1400	1500	Complete PB Mailed to MAJCOM	3	5	10
1500	1600	Complete PB Review & Mail to HQ USAF	34	42	55
1600	1700	HQ USAF Review of Program	60	80	120
1700	1800	OSD & OMB Review of Program	100	140	160
1800	1900	Program Sent to Congress	3	5	10
1900	2000	Congressional Review & Approval	350	360	380
2000	2100	Bills Signed by the President	1	3	10
2100	2200	OMB Apportions Funds to AFRCE	13	26	55
2200	2210	HQ USAF Apportions Funds to AFRCE	13	26	55
2210	6200	Financial Planning	30	50	80
6200	2300	IFB Preparation	13	42	55
2300	2400	CWE Preparation	10	13	21

AD-A109 777 AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL--ETC F/G 5/1
A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION I--ETC(U)
SEP 81 K P HANSEN
UNCLASSIFIED AFIT-LSSR-57-81 NL

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MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
2400	2500	Preparation for Award	26	42	42
2300	2500	Bid Advertisement, Formulation & Receipt	50	63	63
2500	2600	Bids Opened, Reviewed & Approved	3	5	13
2600	2800	Preconstruction Conference Preparation	11	13	21
2800	2900	Facility Construction	1000	1030	1080
2900	3000	Prefinal Inspection	5	5	5
3000	3100	Correct Inspection Deficiencies	42	63	84
3100	3200	Final Inspection	1	1	1
3200	3300	Facility Transfer	4	4	13
3300	3400	Equipment Installation	42	63	84
3400	3500	Facility & Equip. Checkout	26	42	50
3600	3700	Env. Assessment & FONSI Determination	30	45	60
3700	3800	EA Presentation to Base EPC	1	1	1
3800	4100	Base JAG & PA Review FONSI	30	40	50
4100	4200	FONSI Publish & Solicit Public Comments	42	50	60
4200	1400	Complete Programming Documents	3	5	13
1300	4300	DI Issue to MAJCOM/AFRCE	1	1	1
4300	4310	MAJCOM/AFRCE Notify Design Agent	5	5	13
4310	4400	DA Preparation for Predesign Conference	10	13	21
4400	4500	MAJCOM/AFRCE Collects & Reviews Comments	35	40	50
4400	4600	Conceptual Design	50	60	90
4500	4600	Relay Comments to DA	3	5	10
4600	4800	Early Preliminary Design	100	120	140
4800	4900	MAJCOM/AFRCE Collect & Review Comments	35	40	50
4800	5000	Preliminary Design	30	40	60
4900	5000	Relay Comments to DA	3	5	10
4900	5100	Prep for Early Prelim Design Conference	15	20	30
5000	5100	Early Prelim Design Continues	20	30	40
5100	5200	35% Design Notification to MAJCOM	1	1	1
5200	5300	35% Design Notification to HQ USAF	1	1	1
5300	1800	35% Design Notification to OSD	3	3	3
5100	5400	Early Prelim Design Conference	60	80	140
5400	5500	MAJCOM/AFRCE Collect & Review Comments	35	40	50

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
5400	5600	Final Design	60	80	100
5500	5600	Relay Comments to DA	3	5	10
5500	5700	Prep for Prelim Design Conf.	15	20	30
5600	5700	Prelim Design Continues	20	30	40
5700	5800	Prelim Design Conf Comments Incorp.	60	100	120
5800	5900	MAJCOM/AFRCE Collect & Review Comments	35	40	50
5900	6000	Prep for Final Design Conf	15	20	30
5900	2210	95% Design Notification to HQ USAF	5	5	5
5800	6300	Final Design Details	26	42	63
5900	6300	Relay Comments to DA	3	5	10
6300	6000	Final Design Continues	15	20	30
6000	6400	Final Design Comment Incorp	26	42	63
6400	6100	Final Design Review by MAJCOM/AFRCE	13	26	55
6100	6200	Contract Preparation	21	26	42

Event Input Data

Event Number	Description	Date Required (month,day,year)
99	Dummy Start Event	
100	Facility Requirements Defined by Contractor	
200	Base Receives Facility Requirements Report	
300	Facility Survey Complete	
400	Base Facilities Board Approves Facilities Construction	
600	Call Received from MAJCOM	
700	Initial DD Form 1391 Completed	
800	Initial DD Form 1391 Received by MAJCOM	080173
900	Initial Program Received by HQ USAF	101573
1000	Abbreviated Project Book Completed	
1100	Abbreviated PB Received by MAJCOM	120173
1200	Abbreviated PB Received by HQ USAF	
1300	DI Issued by HQ USAF	
1400	Full PB Review Complete	
1500	Full PB Submitted to MAJCOM	070174
1600	Full PB Submitted to HQ USAF	080174
1700	MCP Program Submitted to OSD	100174
1800	OSD/OMB Review Complete	
1900	MCP Program Submitted to Congress	011575
2000	Congress Passed MCP Bill	
2100	President Signs MCP Bill	
2200	Funds Apportioned by OMB	

Event Number	Description
2210	Funds Apportioned by HQ USAF
2300	IFB Ready
2400	CWE Prepared
2500	Construction Bids Prepared
2600	Contract Awarded
2800	Preconstruction Conference Complete
2900	Facility Constructed
3000	Prefinal Inspection Complete
3100	Deficiencies Corrected
3200	Final Inspection Complete
3300	Facility Transfer Complete
3400	Equipment Installation Complete
3500	Facility Ready for Use
3600	CATEX Inapplicability Confirmed
3700	Environmental Assessment Complete
3800	Base EPC Approved EA
4100	FONSI Review Complete
4200	Public Comment Period Complete
4300	DI Issued to MAJCOM/AFRCE
4400	Predesign Conference Complete
4500	Comments on Predesign Collected
4600	DA Received Comments
4800	Early Preliminary Design Review Complete
4900	Preliminary Design Comments Collected
5000	DA Received Comments
5100	Early Preliminary Design Conference Complete
5200	35% Design Report Submitted to AFRCE
5300	35% Design Report Submitted to HQ USAF
5400	Preliminary Design Review Complete
5500	Comments Collected
5600	DA Received Comments
5700	Preliminary Design Conference Complete
5800	Final Design Review Complete
5900	Comments Collected
6000	Final Design Conference Complete
6100	Final Design Approved
6200	MAJCOM/AFRCE Contract Review Complete
6300	DA Receives Comments
6400	Design Complete

APPENDIX B

WEAPONS SYSTEM ACQUISITION MODEL INPUT DATA

Activities Input Data

Note: Time is given in weeks and days format.

Begin Event	End Event	Description	Time Value
10000	10180	Dummy Network Start	0
10180	10190	Prepare Revised Draft DCP	83
10190	10200	Prepare for DSARC Review of Strategy	4
10200	10220	Ratification of Recommendation by Decision Authority	153
10190	10210	Final DCP Preparation	130
10210	10220	Final DCP Approval	30
10220	10230	PMD Finalization	4
10230	10240	Program Control Formulation	13
10180	10240	Continue Baseline Preparation & Analysis	262
10240	10250	Finalize RFP	14
10250	10260	Industry Prepares Reply to RFP	133
10260	10270	Industry Reply Evaluation	94
10270	10290	Final Prototype Source Selection Evaluation	66
10290	10300	DSARC I Review & Selection	1
10300	10310	Final Contract Preparation	4
10310	10320	Prototype Engineering	86
10320	10350	Prototype Fabrication & Manufacture A-10	622
10320	10360	Prototype Fabrication & Manufacture A-9	651
10350	10380	A-10 Prototype Flight Evaluation	206
10360	10380	A-9 Prototype Flight Evaluation	180
10300	10340	A-9 Engine Contract Development	542
10310	10340	A-9 Engine Contract Negotiations	545
10340	10360	A-9 Engine Fabrication & Test	202
10380	10390	Air Force Competitive Flyoff	64
10390	10400	Flyoff Results Evaluation	54
10400	10410	Review & Ratification by Source Selection Authority	1
10410	10420	FSD Contract Preparation & Negotiation	60
10410	10430	Engines Contract Preparation & Negotiation	60
10240	10370	Baseline Data Preparation & Planning	1132
10370	10420	Basic Contract Development & Planning	290
10240	10280	Gun RFP Preparation	163
10280	10330	Industry Reply Formulation & Evaluation	345
10330	10440	Gun Prototype Fabrication & Manufacture	841
10440	10450	Gun Competitive Flyoff	134
10450	10460	Gun Competitive Flyoff Evaluation & Selec.	84
10460	10470	Final Contract Preparation & Negotiation	10
10470	11100	Preliminary Modification to Gun Design	76
11100	11120	Preproduction Gun Fabrication	153
11110	11120	Finalize Gun Design	414

Begin Event	End Event	Description	Time Value
11120	11130	Test & Quality Gun	213
11130	10630	--Dummy--	0
10430	11140	Preliminary Modification to Engine Design	43
11140	11150	Finalize Engine Design	111
11150	11160	Preliminary Engine Testing	385
11160	11170	Engine Qualification Testing	163
11170	11180	Preproduction Engine Fabrication	43
11180	11190	Preproduction Engine Testing	84
11190	10630	--Dummy--	0
11170	11190	Engine Qualification Testing	120
11130	12000	Continuing Gun Production & Delivery	1200
11190	12000	Continuing Engine Production & Delivery	1200
10420	10480	Preproduction Design Modifications	93
10480	10490	Finalize Major Component Design	43
10490	10500	Finalize Design	43
10520	10530	Prepare Final Assembly Plans & Jigs	216
10510	10570	Assemble Major Components	40
10500	10520	Prepare Structural Drawings	302
10490	10510	Manufacture & Deliver Forgings	173
10420	10540	Tool Planning Design & Manufacture	182
10540	10550	Tool Release & Set-Up	42
10550	10560	Develop Manufacturing Details	42
10560	10570	Manufacture Components	174
10570	10530	Assemble Substructure	302
10530	10580	Final Assembly A/C #1	42
10580	10590	Ground Testing	84
10590	10600	Preparation for First Flight	20
10600	10610	Preproduction Aircraft Construction	423
10600	10620	Initial Aircraft Testing & Delivery	76
10620	10630	DT&E of Preproduction Aircraft	1023
10610	10630	Delivery & Test of Last Preproduction A/C	666
11270	11280	FOT&E	324
11280	11300	Initial Operational Cadre Training & Qual	315
11300	12000	--Dummy--	0
10610	11290	Manufacture Production A/C #1	13
11290	11270	IOT&E	214
11290	11310	Equip Test & Training Units	770
11310	11300	Final Preparation & Coordination	232
11290	11310	Continuing Aircraft Production	860
10420	10770	Prepare Vendor Specifications	11
10770	10790	Vendor Reply & Evaluation	60
10770	10780	--Dummy--	0
10780	10800	Prepare Vendor Contract	70
10790	10800	Final Contract Negotiations	10
10790	10810	Prepare Installation Drawings	543
10810	10530	--Dummy--	0
10810	10820	Manufacture & Test Components	106
10820	10630	--Dummy--	0
10800	10830	Manufacture & Test Components	576
10830	10580	Install Components	85

Begin Event	End Event	Description	Time Value
10420	10920	Contract Monitoring & Planning	401
10920	10930	Contract Monitoring & Planning	125
10930	10940	Contract Monitoring & Planning	43
10940	10950	Contract Monitoring & Planning	236
10950	10600	Contract Monitoring & Planning	42
10420	10960	Specification Updating	85
10960	10970	Determine Gun Interference Data	105
10970	10980	Armor Analysis	196
10980	10990	Vulnerable Area Analysis	521
10990	11000	Determine Final Gun Interference Data	302
11000	10630	--Dummy--	0
10420	11010	Prepare Training Plans	43
11010	11020	Prelim Design of Formal Maintenance Training System	130
11020	11030	Final MTS Design	220
11030	11040	Finalize MTS Design Details	170
11040	11050	MTS Planning & Design Review	105
11050	11060	MTS Fabrication	501
11060	11070	MTS Final Detailing & Delivery	43
11070	10630	--Dummy--	0
10420	10910	Initial Cost Verification	540
10910	11200	Review Preliminary FSD Data	141
11200	11210	Ratification of DSARC Recommendations	31
11210	11220	Authorize Long Lead Order	132
10910	11220	Prepare Long Lead Order #1	304
11220	11230	Prepare Long Lead Order #2	373
11230	11240	Program Cost Verification	34
11240	11215	Review of FSD Data	231
11215	11270	Ratification of DSARC Recommendations	20
11240	11250	Review of Test Data	85
11250	11260	Review of FSD Data	42
11260	11215	Preparation for DSARC Review	80
10420	10840	Determine Preliminary Design Loads	86
10840	10850	Determine Final Design Loads	351
10850	10860	Vibration & Acoustics Analysis	344
10860	10630	--Dummy--	0
10840	10480	--Dummy--	0
10850	10520	--Dummy--	0
10420	10870	Gun Location Determination	182
10870	10880	Prepare Gun Installation Drawing	432
10880	10590	Gun Groundchecks	216
10420	10890	Prepare Avionics Orders	202
10890	10900	Avionics Integration & Testing	651
10900	10600	--Dummy--	0
10890	11080	Negotiate Order	21
11080	11090	Manufacture & Deliver Avionics	391
11090	10580	Install Avionics	131
10420	10670	Conduct Static Article Tests	1181
10670	10630	--Dummy--	0
10420	10750	Miscellaneous Test Planning	20

Begin Event	End Event	Description	Time Value
10750	10760	Conduct Miscellaneous Tests	1590
10760	10630	--Dummy--	0
10420	10640	Wind Tunnel Drag Tests	105
10640	10650	Store Separation Tests	216
10650	10660	Flutter Tests	240
10660	10600	--Dummy--	0
10420	10680	Fatigue Article Test Planning	261
10680	10690	Fatigue Article Fabrication & Assembly	606
10690	10700	Fatigue Testing	344
10700	10710	Continue Fatigue Testing	216
10710	10720	Continue Fatigue Testing	261
10720	10630	--Dummy--	0
10420	10725	Egress Test Design Modifications	60
10725	10730	Egress Structural Tests	256
10730	10740	Egress Track Tests	214
10740	10600	--Dummy--	0
10630	11280	--Dummy--	0
11220	11290	--Dummy--	0

Event Input Data

Event Number	Description
10000	Dummy Network Start
10180	Source Selection Authority Reorients to Competitive Prototyping Strategy
10190	Revised Draft DCP Prepared
10200	DSARC Review Complete
10210	Final DCP 23A Completed
10220	DCP 23A Approved by Deputy SECDEF
10230	PMD Issued
10240	A-X SPO Fully Established
10250	RFP Issued to Industry
10260	Response to RFP Received
10270	Source Selection Advisory Committee Recommendations Briefed to Source Selection Authority
10280	RFP for Gun Issued to Industry
10290	DSARC I
10300	Contractors Selected for Competitive Prototype
10310	Authorization to Award Contract
10320	Prototypes Designated A-9 & A-10
10330	Gun Prototyping Contractors Selected
10340	A-9 Engine Contract Negotiated
10350	A-10 First Flight
10360	A-9 First Flight
10370	Proposal Instruction for FSD Released

Event Number	Description
10380	Start Air Force Flyoff
10390	Flyoff Completed
10400	DSARC II
10410	A-10 Selected for FSD
10420	Contract Award to Fairchild Republic Company for FSD
10430	Engine Contract Award to General Electric
10440	Gun Competitive Shootoff Begins
10450	Gun Competitive Shootoff Ends
10460	General Electric Selected for Gun FSD
10470	Contract Award to GE for Gun
10480	Design Layouts Complete
10490	Major Forging Release
10500	Design Freeze
10510	Receive Forgings
10520	Release Structural Drawings
10530	Structural Assembly Manufacture
10540	Tool Planning, Design & Manufacture Complete
10550	Release Tools
10560	Manufacturing Details Complete
10570	Structural Assembly Complete
10580	Final Assembly A/C #1 Complete
10590	Ground Test Complete
10600	First Flight A/C #1 (Preproduction)
10610	Deliver A/C #10 (Preproduction)
10620	Start DT&E Testing
10630	Complete DT&E Testing
10640	Complete Wind Tunnel Tests
10650	Store Separation Tests Complete
10660	Complete Flutter Tests
10670	Static Article Tests Complete
10680	Fatigue Article Test Planning Complete
10690	Final Assembly Complete
10700	One Lifetime Fatigue Testing Complete
10710	Two Lifetimes Fatigue Testing Complete
10720	Four Lifetimes Fatigue Testing Complete
10730	Egress Structural Tests Complete
10725	Egress Tests Design Modifications Complete
10740	Egress Track Tests Complete
10750	Miscellaneous Test Planning Complete
10760	Miscellaneous Tests Complete
10770	Release Vendor Specifications
10780	Issue RFQ
10790	Select Vendor
10800	Issue Purchase Order
10810	Release Installation Drawings
10820	Qualification Tests Complete
10830	Receive Components
10840	Preliminary Design Loads & Criteria Set
10850	Final Design Loads & Criteria Set
10860	Vibration & Acoustic Analysis Complete
10870	Gun Location Freeze

Event Number	Description
10880	Gun Installation Drawing Complete
10890	Avionics Long Lead Orders Released
10900	Avionics Integration & Testing Complete
10910	Design to Cost Demo Complete
10920	PDR
10930	PRR
10940	CDR
10950	Safety Inspection
10960	Specification Update
10970	Preliminary Gun Interference Data Complete
10980	Armor Analysis Complete
10990	Vulnerable Area Analysis
11000	Final Gun Interference Specifications
11010	Training Plans Complete
11020	Formal MTS Design
11030	MTS Design Freeze
11040	MTS PDR
11050	MTS CDR
11060	MTS PCA/FCA
11070	Delivery of MTS
11080	CFAE Ordered
11090	CFAE Received
11100	Gun PDR
11110	Receive Phase I Gun
11120	Gun CDR
11130	Gun Qualification Tests Complete
11140	Engine Hardware Design Complete
11150	Engine CDR
11160	AEDC Engine Exploratory Tests Complete
11170	AEDC Qualification Tests Complete
11180	Receive Engine #1
11190	MQT Approval
11200	DSARC IIIA
11210	Authorization for Initial Production
11215	DSARC IIIB
11220	Long Lead Items Option 1 Funding Point
11230	Long Lead Items Option 2 Funding Point
11240	Design to Cost Demonstration
11250	FCA
11260	PCA
11270	FOT&E Program Start
11280	FOT&E Program End (Phase I)
11290	First Production A/C Delivery
11300	Operational Unit IOC
11310	SATAF Activated
12000	Dummy Network End

APPENDIX C

INTEGRATING ACTIVITIES

Activities Input Data

Note: Times are given in weeks and days format.

Begin Event	End Event	Description	Opt. Time	Most Likely	Pess. Time
10420	100	Facility Requirements Report Generation	213	255	300
3500	11300	--Dummy--	0	0	0
11310	2900	SATAF Review & Action to Meet IOC	643	771	855
10500	6000	--Dummy--	0	0	0
(10410	10420	FSD Contract Preparation & Negotiation	1	171	255)

APPENDIX D

FACILITY ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity (σ_{t_e}) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.

The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time (t_e) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date (T_E) for completion of the activity.

ALLOWABLE DATE - latest allowable date (T_L) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date (T_A) is shown preceded by the letter A. If a required completion date has been specified, that date (T_R) is shown preceded by the letter R.

SLACK - slack for the activity ($T_L - T_E$)

TIME REMAINING - time from the report date until expected completion date (T_E) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date (T_E) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date (T_L) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event (T_A).

SLACK - slack for the event ($T_L - T_E$)

LEGEND
A.... ADDITION OF ACTIVITY
R....REPLACEMENT OF ACTIVITY
D....DELETION OF ACTIVITY
...BLANK INDICATES NO CHANGE OF ACTIVITY ON OLD MASTER FILE

*DATE CHG	EVENT PRED	EVENT SUCC	ACTIVITY DESCRIPTION	ACCOUNT NBR	OPS	FILE-STATUS CODE	ARAS DATE	ACT TIME	MAN-DAYS
	99	99	--DUMMY START--						
99	A 1/15/73	0	0						
	99	100	--DUMMY START--				A 1/15/73	0	0
	100	100	FACILITY REQUIREMENTS DEFINED BY CDSIG						
11		0	0						
	100	200	FACILITY REQUIREMENTS SENT TO BASE		SDVT			0	0
	200	200	BASE RECEIVES FACILITY REQ REPORT						
21		0	0						
	200	300	FACILITY SURVEY		BASE			44	2
	200	3600	INITIAL ENVIRONMENTAL EVALUATION		BASE			48	5
	300	300	FACILITY SURVEY COMPLETE						
31		0	0						
A	300	400	CONSTRUCTION PROGRAM DETERMINATION		BASE			48	2
A	400	400	BASE RQ APPROVES FACILITY CONCEP						
46		0	0						
	400	600	INITIAL DOCUMENTATION DEVELOPMENT		BASE			32	0
A	600	600	CALL RECEIVED FROM MAJCOM						
71		0	0						
A	600	700	INITIAL DD FORM 1391 DEVELOPMENT		BASE			0	0
A	700	700	INITIAL 1391 COMPLETED						
661		0	0						
A	700	800	1391 RECEIPT & REVIEW BY MAJCOM		MAJCOM		R 8/13/73	66	7
A	700	1000	ABBREVIATED PROJECT BOOK DEVELOPMENT		BASE			176	11
A	800	800	INITIAL DD FORM 1391 RECEIVED BY MAJCOM						
86	R 8/ 1/73	0	0						
A	800	900	PROGRAM AMENDMENT & FORWARD TO HQ USAF		MAJCOM		R1 /13/73	100	9
A	800	1100	MAJCOM REVIEW OF 1391		MAJCOM		R12/ 1/73	44	4
A	900	900	INITIAL PROGRAM RECEIVED BY HQ USAF						
96	R10/15/73	0	0						

A	800	1200 PROGRAM REVIEW BY HQ USAF	HQ USAF		135	10
A	1000	1600 ABBREVIATED PROJECT BOOK COMPLETED				
101		0 0				
A	1000	1100 ABBREVIATED PD MAILED TO MAJCOM	MAJCOM	12/ 1/73	0	0
A	1000	1400 COMPLETE PD PREPARATION	DAFE		863	17
A	1100	1100 ABBREVIATED PD RECEIVED BY MAJCOM				
111	12/ 1/73	1 0				
A	1100	1900 MAJCOM REVIEW OF ABBREVIATED PD	MAJCOM	7/ 1/74	131	0
A	1200	1200 ABBREVIATED PD RECEIVED BY HQ USAF				
121		0 0				
A	1200	1300 APPROVED PROGRAM SELECTION BY HQ USAF	HQ USAF	8 3/ 1/74	32	3
A	1300	1300 DI ISSUED BY HQ USAF				
141		0 0				
A	1300	1600 PDR ESTABLISHMENT BY HQ USAF	HQ USAF		220	19
A	1300	4300 DI ISSUE TO MAJCOM/AFRCE	HQ USAF		2	0
A	1400	1400 FULL PD REVIEW COMPLETE				
121		0 0				
A	1400	1900 COMPLETE PD MAILED TO MAJCOM	DAFE	7/ 1/74	0	0
A	1500	1500 FULL PD SUBMITTED TO MAJCOM				
191	7/ 1/74	0 0				
A	1500	1600 COMPLETE PD REVIEW & MAIL TO HQ USAF	MAJCOM	7/ 1/74	45	3
A	1600	1500 FULL PD SUBMITTED TO HQ USAF				
101	8/ 1/74	0 0				
A	1600	1700 HQ USAF REVIEW OF PROGRAM	HQ USAF	11/ 1/74	53	10
A	1700	1700 MCP PROGRAM SUBMITTED TO OSD				
171	10/ 1/74	7 0				
A	1700	1800 OSD & OMB REVIEW OF PROGRAM	OSD		134	10
A	1800	1800 OSD/OMB REVIEW COMPLETE				
181		0 0				
A	1800	1900 PROGRAM SENT TO CONGRESS	JCAPLSS	1/15/75	0	0
A	1900	1900 MCP PROGRAM SUBMITTED TO CONGRESS				
191	1/15/75	0 0				
A	1900	2000 CONGRESSIONAL REVIEW & APPROVAL	DAMPCSS		301	9
A	2000	2000 CONGRESS PASSED MCP BILL				
291		0 0				
A	2000	2100 BILLS SIGNED BY PRESIDENT	PRESIDENT	10/ 1/75	6	1
A	2100	2100 PRESIDENT SIGNS MCP BILLS				
211	10/ 1/75	0 0				
A	2100	2200 OMB APPORTIONS FUNDS	OMB		24	7

A	2200	2200 FUNDS APPORTIONED BY OMB			
231		1 9			
A	2200	2210 HQ USAF APPORTIONS FUNDS TO AFSCE	AFSCE	34	7
A	2210	2210 FUNDS APPORTIONED BY HQ USAF			
241		8 8			
A	2210	0300 FINANCIAL PLANNING	AFSCF	91	8
A	2301	2300 IFB READY			
291		1 9			
A	2300	2400 CWE PREPARATION	AFSCF	15	2
A	2300	2400 BID ADVERTISEMENT, FORMULATION & RECEIPTS	AFSCF	63	2
A	2400	2400 CWE PREPARED			
304		8 7			
A	2400	2500 PREPARATION FOR AWARD	AFSCF	42	2
A	2500	2500 CONSTRUCTION BIDS PREPARED			
271		8 9			
A	2500	2600 BIDS OPENED, REVIEWED & APPROVED	AFSCE	10	5
A	2600	2600 CONTRACT AWARDED			
281		8 8			
A	2600	2000 PRECONSTRUCTION CONF PREPARATION	AFSCE	15	5
A	2000	2000 PRECONSTRUCTION CONFERENCE COMPLETE			
291		8 8			
A	2000	2900 FACILITY CONSTRUCTION	AFSCE	1000	13
A	2900	2900 FACILITY CONSTRUCTED			
301		8 8			
A	2900	3000 PRELIMINAL INSPECTION	AFSCE	10	0
A	3000	3000 PRELIMINAL INSPECTION COMPLETE			
311		8 9			
A	3000	3100 CORRECT INSPECTION DEFICIENCIES	AFSCE	66	7
A	3100	3100 DEFICIENCIES CORRECTED			
321		1 9			
A	3100	3200 FINAL INSPECTION	AFSCF	2	0
A	3200	3200 FINAL INSPECTION COMPLETE			
331		8 8			
A	3200	3300 FACILITY TRANSFER	AFSCF	5	1
A	3300	3300 FACILITY TRANSFER COMPLETE			
301		8 8			
A	3300	3400 EQUIPMENT INSTALLATION	AFSCE	66	7
A	3400	3400 EQUIPMENT INSTALLATION COMPLETE			
391		1 9			
A	0400	3500 FACILITY AND EQUIPMENT CHECKOUT	AFSCF	43	3

A	3500	3500 FACILITY READY FOR USE			
	301	1 4			
A	3600	3600 CATEX 1 APPLICABILITY CONFIRMED			
	371	3 0			
A	3600	3700 EAV ASSESSMENT & FONSI DETERMINATION	BASE	40	5
A	3700	3700 ENVIRONMENTAL ASSESSMENT COMPLETE			
	301	3 9			
A	3700	3800 EA PRESENTATION TO BASE EPC	BASE	2	0
A	3800	3800 BASE EPC APPROVED EA			
	391	3 0			
A	3800	4100 BASE JAG & PA REVIEW FONSI	BASE	40	3
A	4100	4100 FONSI REVIEW COMPLETE			
	421	0 0			
A	4100	4200 FONSI PUBLISH & SOLICIT PUBLIC COMMENTS	BASE	30	2
A	4200	1400 COMPLETE PROGRAMMING DOCUMENTS	BASE	10	1
A	4200	4200 PUBLIC COMMENT PERIOD COMPLETE			
	431	0 0			
A	4200	4300 DD ISSUED TO MAJCOM/AFREC			
	441	0 0			
A	4300	4310 MAJCOM/AFREC NOTIFY DESIGN AGENT	AFREC	15	5
A	4310	4310 DA NOTIFIED BY DD			
	451	0 0			
	4310	4400 DA PREPARATION FOR PREDESIGN CONF	DOE	20	2
B	4400	4400 PREDESIGN CONFERENCE COMPLETE			
	461	0 0			
A	4400	4500 MAJCOM/AFREC COLLECTS & REVIEWS COMMTS	AFREC	41	1
A	4400	4500 CONCEPTUAL DESIGN	DOE	63	5
A	4500	4500 COMMENTS ON PREDESIGN COLLECTED			
	471	0 0			
A	4500	4600 RELAY COMMENTS TO DA	AFREC	0	0
A	4600	4600 DA RECEIVES COMMENTS			
	481	0 9			
A	4500	4600 EARLY PRELIMINARY DESIGN	DOE	180	6
A	4600	4600 EARLY PRELIM DESIGN REVIEW COMPLETE			
	491	1 1			
A	4600	4600 MAJCOM/AFREC COLLECT & REVIEW COMMENTS	AFREC	41	1
A	4600	5000 PRELIMINARY DESIGN	DOE	41	0
A	4600	4600 PRELIM DESIGN COMMENTS COLLECTED			
	501	1 1			
A	4600	5000 RELAY COMMENTS TO DA	AFREC	0	0

UNCLASSIFIED

A	4000	5100 PREP FOR EARLY PRELIM DESIGN CONF	APSCP		21	1
A	9000	6400 DA RECEIVED COMMENTS				
211		0 0				
A	5000	5100 EARLY PRELIM DESIGN CONTINUES	22?		31	2
A	5100	5100 EARLY PRELIM DESIGN CONF COMPLETE				
221		0 0				
A	5100	5200 XXX DESIGN NOTIFICATION TO MAJCOM	22?		2	0
A	5100	5400 EARLY PRELIM DESIGN CONF COMMENTS	20?		44	13
A	5200	5200 22? DESIGN REPORT SUBMITTED TO AFSEC				
231	5121 1/74	0 0				
A	5200	5200 22? DESIGN NOTIFICATION TO HQ USAF	AFSCC	5121 1/74	2	0
A	5300	5300 22? DESIGN NOTIFICATION TO OSD	HQ USAF		4	0
A	5300	5300 22? DESIGN REPORT SUBMITTED TO HQ USAF				
241		0 0				
A	5400	5400 PRELIM DESIGN REPORT COMPLETE				
251		0 0				
A	5400	5500 MAJCOM/AFSCE COLLECT & REVIEW COMMENTS	AFSCE		44	1
A	5400	5400 FINAL DESIGN	20?		40	0
A	5500	5500 COMMENTS COLLECTED				
261		0 0				
A	5500	5600 RELAY COMMENTS TO DA	AFSCE		0	0
A	5500	5700 PREP FOR PRELIM DESIGN CONFERENCE	AFSCE		21	1
A	5600	5600 DA RECEIVED COMMENTS				
271		0 0				
A	5600	5700 PRELIM DESIGN CONTINUES	20?		30	2
A	5700	5700 PRELIM DESIGN CONF COMPLETE				
281		0 0				
A	5700	5800 PRELIM DESIGN CONF COMMENTS INCORP	20?		90	10
A	5800	5800 FINAL DESIGN REVIEW COMPLETE				
291		0 0				
A	5800	5900 MAJCOM/AFSCE COLLECT & REVIEW COMMENTS	AFSCE		44	1
A	5800	6300 FINAL DESIGN DETAILS	20?		40	5
A	5900	2210 20? DESIGN NOTIFICATION TO HQ USAF	AFSCP		20	0
A	5900	5900 COMMENTS COLLECTED				
301		0 0				
A	5900	6000 PREP FOR FINAL DESIGN CONFERENCE	AFSCP		21	1
A	5900	6300 RELAY COMMENTS TO DA	AFSCE		9	0

UNCLASSIFIED

A	6000	6000 FINAL DESIGN CONFERENCE COMPLETE					
011		0 0					
A	6000	6400 FINAL DESIGN COMMENTS INCORPORATED	70I	7109/ 1/78	46	5	
A	6100	6100 FINAL DESIGN APPROVED					
021		0 0					
A	6100	6200 CONTRACT PREPARATION	4P10F		1E	3	
A	6200	2300 IFB PREPARATION	4P10F		4E	7	
A	6200	6200 MAJCOM/AFMCE CONTRACT REVIEW COMPLT					
031		0 0					
A	6300	6000 FINAL DESIGN CONTINUES	08E		4A	3	
A	6300	6300 DA RECEIVES COMMENTS					
041		0 0					
A	6400	6300 FINAL DESIGN REVIEW BY MAJCOM/AFMCE	6P10E		3A	7	
A	6400	6400 DESIGN COMPLETE					
001	5109/ 1/78	0 0					

PERT/TIME
ACTIVITY REPORT

FACILITY ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. UP1 — TERM- FAN 10 YEAR CAL
1ST SORT KEY PREDECESSOR EVENT NO. — REPORT DATE- 1/ 1/69
2ND SORT KEY SUCCESSOR EVENT NO. — RELEASE DATE-11/15/69
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

	EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP'D/SCHED	SLACK	REMAINING TIME	ORG.
	90	100	--DUMMY START--		0.0		1/15/73	A 1/15/73	0.0	0.0	
I	100	200	FACILITY REQUIREMENTS SENT TO BASE		0.0	1/22/73	1/22/73		0.0	106.9	CONT
	200	300	FACILITY SURVEY	.98	4.6	2/22/73	2/22/73		0.0	171.5	BASE
	200	3600	INITIAL ENVIRONMENTAL EVALUATION	.99	4.5	2/21/73	1/ 9/74		44.5	171.4	BASE
	300	400	CONSTRUCTION PROGRAM DETERMINATION	.98	4.5	3/26/73	3/26/73		0.0	173.4	BASE
	400	600	INITIAL DOCUMENTATION DEVELOPMENT	.98	3.3	4/18/73	4/18/73		0.0	179.3	BASE
	600	700	INITIAL DD FORM 1391 DEVELOPMENT	.98	0.0	4/24/73	4/24/73		0.0	180.2	BASE
	700	900	1391 RECEIPT & REVIEW BY MAJCOM	.99	6.6	5/11/73	6/11/73	R 8/15/73	0.0	196.8	MAJCOM
	700	1000	ABBREVIATED PROJECT BOOK DEVELOPMENT	.99	17.4	8/27/73	10/17/73		7.0	197.6	BASE
	800	900	PROGRAM ASSIGNMENT & FORWARD TO HQ USAF	.99	10.0	8/27/73	8/27/73	R10/15/73	0.0	197.6	MAJCOM
	900	1100	MAJCOM REVIEW OF 1391	.99	6.4	7/12/73	11/30/73	R11/30/73	19.6	191.2	MAJCOM
	900	1200	PROGRAM REVIEW BY HQ USAF	.96	13.5	12/ 4/73	12/ 4/73		0.0	211.1	HQ USAF
	1000	1100	ABBREVIATED PB MAILED TO MAJCOM	.99	0.0	9/ 6/73	11/30/73	R11/30/73	12.3	198.5	BASE
	1000	1400	COMPLETE PB PREPARATION	.98	25.3	3/ 6/74	4/24/74		7.0	223.9	BASE
	1100	1500	MAJCOM REVIEW OF ABBREVIATED PB	.99	13.1	12/ 6/73	4/31/74	R 7/ 1/74	28.2	211.6	MAJCOM
	1200	1300	APPROVED PROGRAM SELECTION BY HQ USAF	.99	0.2	12/27/73	12/27/73	R 2/ 1/74	0.0	214.3	HQ USAF
	1300	1600	POM ESTABLISHMENT BY HQ USAF	.96	22.0	6/ 3/74	6/ 3/74		0.0	236.3	HQ USAF
	1300	4300	DI ISSUE TO MAJCOM/AFRCE	.99	0.2	12/28/73	4/ 4/74		13.7	214.5	HQ USAF
	1400	1500	COMPLETE PB MAILED TO MAJCOM	.99	6.9	5/12/74	6/30/74	R 7/ 1/74	7.0	224.8	BASE
	1500	1600	COMPLETE PB REVIEW & MAIL TO HQ USAF	.99	6.5	7/12/74	6/ 3/74	R 8/ 1/74	7.0	229.3	MAJCOM
	1600	1700	HQ USAF REVIEW OF PROGRAM	.99	8.3	7/31/74	7/31/74	R16/ 1/74	0.0	244.6	HQ USAF
	1700	1900	OSD & 349 REVIEW OF PROGRAM	.96	13.6	11/ 5/74	11/ 5/74		0.0	259.2	OSD
	1800	1900	PROGRAM SENT TO CONGRESS	.99	6.9	11/13/74	11/13/74	R 1/15/75	0.0	254.1	CONGRESS
	1900	2000	CONGRESSIONAL REVIEW & APPROVAL	.98	36.1	7/30/75	7/31/75		0.0	498.2	CONGRESS
	2000	2100	BILLS SIGNED BY PRESIDENT	.99	8.6	8/ 4/75	8/ 4/75	10/ 1/75	0.0	295.8	PRESIDEN
	2100	2200	OMB APPORTIONS FUNDS	.96	8.4	8/27/75	8/27/75		0.0	299.2	OMB
	2200	2210	HQ USAF APPORTIONS FUNDS TO AFRCE	.98	3.4	9/22/75	9/22/75		0.0	312.6	HQ USAF
	2210	6280	FINANCIAL PLANNING	.98	9.1	1 /28/75	11/28/75		0.0	317.7	AFRCE
	2300	2400	CWE PREPARATION	.96	1.6	12/10/75	12/12/75		0.5	313.5	AFRCE
	2300	2500	BID ADVERTISEMENT,FORMULATION & RECEIPT	.98	6.3	1/14/76	1/14/76		0.0	318.2	AFRCE
	2400	2500	PREPARATION FOR AWARD	.96	6.2	1/12/76	1/14/76		0.0	317.7	AFRCE
	2500	2600	BIDS OPENED, REVIEWED & APPROVED	.96	1.6	1/21/76	1/21/76		0.0	319.2	AFRCE
	2600	2900	PRECONSTRUCTION CONF PREPARATION	.98	1.6	2/ 2/76	2/ 2/76		0.0	320.8	AFRCE
	2000	2900	FACILITY CONSTRUCTION	.98	133.3	2/ 8/78	2/ 8/78		0.0	424.1	AFRCE
	2900	3000	PREFINAL INSPECTION	.98	1.0	2/15/78	2/15/78		0.0	425.1	AFRCE
	3000	3100	CORRECT INSPECTION DEFICIENCIES	.98	6.6	4/ 3/78	4/ 3/78		0.0	431.7	AFRCE
	3100	3200	FINAL INSPECTION	.98	0.2	4/ 4/78	4/ 4/78		0.0	431.9	AFRCE
	3200	3300	FACILITY TRANSFER	.98	0.0	4/10/78	4/11/78		0.0	432.0	AFRCE
	3300	3400	EQUIPMENT INSTALLATION	.98	6.6	5/25/78	5/25/78		0.0	439.4	BASE
	3400	3500	FACILITY AND EQUIPMENT CHECKOUT	.98	4.3	6/27/78	6/27/78		0.0	443.7	BASE

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS
CONTRACT NO. 0.1

FACILITY ACCQUISITION NETWORK
1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

TERM- FAN 13 YEAR CAL
REPORT DATE- 1./1./69
RELEASE DATE-10/1./69

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
3600	3700	ENV ASSESSMENT & FONSI DETERMINATION	.99	4.8	3/27/73	2/12/74		44.5	170.2	BASE
3700	3800	EA PREPARATION TO BASE EPC	.99	4.2	3/28/73	2/13/74		44.5	170.4	BASE
3800	4100	BASE BLD & PA REVIEW FONSI	.99	4.8	4/26/73	3/13/74		44.5	18..4	BASE
4100	4200	FONSI PUBLISH & SOLICIT PUBLIC COMMENTS	.99	5.8	5/31/73	4/17/74		44.5	16..4	BASE
4200	1400	COMPLETE PROGRAMMING DOCUMENTS	.99	1.8	6/ 7/73	4/24/74		44.5	130.4	BASE
4300	4310	MAJCOM/AFRCE NOTIFY DESIGN AGENT	.99	1.1	1/ 7/74	4/12/74		13.7	215.6	AFRCE
4310	4400	DA PREPARATION FOR PREDESIGN CONF	.99	1.6	1/17/74	4/24/74		13.7	217.2	COE
4400	4500	MAJCOM/AFRCE COLLECTS & REVIEWS COMNTS	.99	4.1	2/15/74	5/ 3/74		15.1	221.3	AFRCE
4400	4600	CONCEPTUAL DESIGN	.99	6.3	3/ 4/74	6/ 7/74		13.7	223.5	COE
4500	4600	RELAY COMMENTS TO DA	.99	8.9	2/21/74	5/ 7/74		15.0	222.2	AFRCE
4600	4600	EARLY PRELIMINARY DESIGN	.99	12.8	2/27/74	5/ 3/74		13.7	239.5	COE
4600	4700	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	6/25/74	10/ 2/74		13.7	239.6	AFRCE
4600	5000	PRELIMINARY DESIGN	.99	4.1	6/25/74	11/ 8/74		14.0	239.6	COE
4900	5000	RELAY COMMENTS TO DA	.99	8.9	7/ 2/74	11/ 8/74		13.7	241.5	AFRCE
4900	5100	PREP FOR EARLY PRELIM DESIGN CONF	.99	2.1	7/11/74	10/29/74		15.5	241.7	AFRCE
5000	5100	EARLY PRELIM DESIGN CONTINUES	.99	3.6	7/24/74	10/23/74		13.7	243.5	COE
5100	5200	35% DESIGN NOTIFICATION TO MAJCOM	.99	8.2	7/25/74	10/31/74		13.7	243.7	COE
5100	5400	EARLY PRELIM DESIGN CONF COMMENTS	.99	8.6	9/24/74	1/24/75		16.8	252.1	COE
5200	5300	35% DESIGN NOTIFICATION TO HQ USAF	.99	9.2	7/26/74	10/31/74	11/29/74	13.7	243.9	AFRCE
5300	1400	35% DESIGN NOTIFICATION TO OSD	.99	8.6	7/31/74	11/ 5/74		13.7	244.5	HQ USAF
5400	5500	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	1 /22/75	3/14/75		19.8	256.2	AFRCE
5400	5600	FINAL DESIGN	.99	8.6	11/28/74	3/21/75		16.8	26..1	COE
5500	5600	RELAY COMMENTS TO DA	.99	8.9	1/29/75	3/21/75		19.6	257.1	AFRCE
5500	5700	PREP FOR PRELIM DESIGN CONFERENCE	.99	2.1	11/ 6/74	4/11/75		21.0	258.9	AFRCE
5600	5700	PRELIM DESIGN CONTINUES	.99	3.1	12/12/74	4/11/75		16.8	263.1	COE
5700	5300	PRELIM DESIGN CONF COMMENTS INCORP	.99	9.6	2/26/75	6/19/75		16.8	272.7	COE
5800	5900	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	3/26/75	7/13/75		16.8	276.8	AFRCE
5800	6300	FINAL DESIGN DETAILS	.99	4.5	3/26/75	7/25/75		17.3	277.2	COE
5900	2210	95% DESIGN NOTIFICATION TO HQ USAF	.99	1.8	3/27/75	9/22/75		24.8	277.8	AFRCE
5900	6100	PREP FOR FINAL DESIGN CONFERENCE	.99	2.1	4/ 4/75	8/ 8/75		17.7	278.9	AFRCE
5900	6300	RELAY COMMENTS TO DA	.99	8.9	3/27/75	7/25/75		16.8	277.7	AFRCE
6000	6400	FINAL DESIGN COMMENTS INCORPORATED	.99	4.5	5/13/75	9/11/75	10/ 1/75	16.8	284.3	COE
6100	6200	CONTRACT PREPARATION	.99	3.2	6/30/75	11/28/75		16.8	293.9	AFRCE
6200	2100	IFB PREPARATION	.50	4.2	11/28/75	11/28/75		0.0	311.9	AFRCE
6300	6500	FINAL DESIGN CONTINUES	.99	2.1	7/10/75	8/ 8/75		16.8	279.8	COE
6400	6100	FINAL DESIGN REVIEW BY MAJCOM/AFRCE	.99	3.4	6/ 8/75	10/ 6/75		16.8	287.7	AFRCE

PERT/TIME
MILESTONE REPORT

FACILITY ACQUISITION NETWORK

REPORTING ORGN. AFIT/LS

CONTRACT NO. 001

TERM FAN 10 YEAR CAL
REPORT DATE- 11/10/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,10/10/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
100	FACILITY REQUIREMENTS DEFINED BY CONTR	1				1/15/73	0.0
200	BASE RECEIVES FACILITY REQ REPORT	2	1/22/73	1/22/73			0.0
300	FACILITY SURVEY COMPLETE	3	2/22/73	2/22/73			0.0
400	BASE FD APPROVES FACILITY CONSTR	4	3/26/73	3/26/73			0.0
600	CALL RECEIVED FROM MAJCOM	7	4/10/73	4/10/73			0.0
800	INITIAL DD FORM 1391 RECEIVED BY MAJCOM	8	6/11/73	6/11/73	R 9/ 1/73		0.0
900	INITIAL PROGRAM RECEIVED BY HQ USAF	9	8/27/73	8/27/73	R11/15/73		0.0
1000	ABBREVIATED PROJECT BOOK COMPLETED	10	8/27/73	11/17/73			7.0
1100	ABBREVIATED PB RECEIVED BY MAJCOM	11	9/ 4/73	11/30/73	R11/30/73		12.3
1400	FULL PB REVIEW COMPLETE	12	3/ 6/74	4/24/74			7.0
1200	ABBREVIATED PB RECEIVED BY HQ USAF	13	12/ 4/73	12/ 4/73			0.0
1300	DI ISSUED BY HQ USAF	14	12/27/73	12/27/73			0.0
1500	FULL PB SUBMITTED TO MAJCOM	15	3/12/74	4/21/74	R 7/ 1/74		7.3
1600	FULL PB SUBMITTED TO HQ USAF	16	6/ 3/74	6/ 3/74	R 8/ 1/74		0.0
1700	MCP PROGRAM SUBMITTED TO OSD	17	7/31/74	7/31/74	R12/ 1/74		0.0
1800	OSD/OMB REVIEW COMPLETE	18	11/ 5/74	11/ 5/74			0.0
1900	MCP PROGRAM SUBMITTED TO CONGRESS	19	11/13/74	11/13/74	R 1/15/75		0.0
2000	CONGRESS PASSES MCP BILL	20	7/30/75	7/31/75			0.0
2100	PRESIDENT SIGNS MCP BILLS	21	8/ 4/75	8/ 4/75	R13/ 1/75		0.0
2200	FUNDS APPORTIONED BY OMB	23	8/27/75	8/27/75			0.0
2210	FUNDS APPORTIONED BY HQ USAF	24	9/22/75	9/22/75			0.0
2300	IFB READY	25	11/28/75	11/28/75			0.0
2400	CWE PREPARED	26	12/11/75	12/12/75			0.5
2500	CONSTRUCTION BIDS PREPARED	27	1/14/76	1/14/76			0.0
2600	CONTRACT AWARDED	28	1/21/76	1/21/76			0.0
2800	PRECONSTRUCTION CONFERENCE COMPLETE	29	2/ 2/76	2/ 2/76			0.0
2900	FACILITY CONSTRUCTED	30	2/ 8/78	2/ 8/78			0.0
3000	PREFINAL INSPECTION COMPLETE	31	2/15/78	2/15/78			0.0
3100	DEFICIENCIES CORRECTED	32	6/ 3/78	6/ 3/78			0.0
3200	FINAL INSPECTION COMPLETE	33	6/ 4/78	6/ 4/78			0.0
3300	FACILITY TRANSFER COMPLETE	34	6/10/78	6/10/78			0.0
3600	EQUIPMENT INSTALLATION COMPLETE	35	5/25/78	5/25/78			0.0
3900	FACILITY READY FOR USE	36	6/27/78	6/27/78			0.0
3600	CATEX INAPPLICABILITY CONFIRMED	37	2/21/73	1/ 9/74			44.5
3700	ENVIRONMENTAL ASSESSMENT COMPLETE	38	3/27/73	2/12/74			44.5
3800	BASE EPC APPROVED EA	39	3/28/73	2/13/74			44.5
4100	FONSI REVIEW COMPLETE	42	4/25/73	3/13/74			44.5
4200	PUBLIC COMMENT PERIOD COMPLETE	43	5/31/73	4/17/74			44.5
4300	DI ISSUED TO MAJCOM/AFRCE	44	12/28/73	4/ 4/74			13.7
4310	DA NOTIFIED OF DI	45	1/ 7/74	4/12/74			13.7

PERT/TIME
MILESTONE REPORT

FACILITY ACQUISITION NETWORK REPORTING ORGN. AFIT/LS CONTRACT NO. 001 TERM FAN 16 YEAR CAL
REPORT DATE- 1[illegible]/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,11/10/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
4400	PREDESIGN CONFERENCE COMPLETE	45	1/17/74	4/24/74			13.7
4540	COMMENTS ON PREDESIGN COLLECTED	47	2/15/74	6/ 3/74			15.6
4600	DA RECEIVED COMMENTS	48	3/ 4/74	6/ 7/74			13.7
4800	EARLY PRELIM DESIGN REVIEW COMPLETE	49	5/27/74	9/ 3/74			13.7
4980	PRELIM DESIGN COMMENTS COLLECTED	50	6/25/74	1[illegible]/ 2/74			13.7
5030	DA RECEIVED COMMENTS	51	[illegible]/ 2/74	1[illegible]/ 8/74			13.7
5100	EARLY PRELIM DESIGN CONF COMPLETE	52	7/24/74	10/25/74			13.7
5200	35% DESIGN REPORT SUBMITTED TO AFRCE	53	7/25/74	1[illegible]/31/74	11/29/74		13.7
5300	35% DESIGN REPORT SUBMITTED TO HQ USAF	54	7/26/74	10/31/74			13.7
5400	PRELIM DESIGN REVIEW COMPLETE	55	9/24/74	1/24/75			16.8
5530	COMMENTS COLLECTED	56	10/22/74	3/14/75			19.8
5600	DA RECEIVED COMMENTS	57	11/26/74	3/21/75			16.8
5700	PRELIM DESIGN CONF COMPLETE	58	12/12/74	4/11/75			16.8
5830	FINAL DESIGN REVIEW COMPLETE	59	2/20/75	6/19/75			16.8
5900	COMMENTS COLLECTED	60	3/26/75	7/18/75			16.8
6000	FINAL DESIGN CONFERENCE COMPLETE	61	4/10/75	8/ 8/75			16.8
6100	FINAL DESIGN APPROVED	62	6/ 6/75	10/ 6/75			16.8
6200	MAJCOM/AFRCE CONTRACT REVIEW COMPLT	63	10/28/75	10/28/75			0.0
6300	DA RECEIVES COMMENTS	64	8/27/75	7/25/75			16.8
6400	DESIGN COMPLETE	65	9/13/75	9/11/75	11/ 1/75		16.8
700	INITIAL 1391 COMPLETED	66	6/24/73	6/24/73			0.0

APPENDIX E

WEAPONS SYSTEM ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity (σ_{t_e}) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.

The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time (t_e) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date (T_E) for completion of the activity.

ALLOWABLE DATE - latest allowable date (T_L) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date (T_A) is shown preceded by the letter A. If a required completion date has been specified, that date (T_R) is shown preceded by the letter R.

SLACK - slack for the activity ($T_L - T_E$)

TIME REMAINING - time from the report date until expected completion date (T_E) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date (T_E) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date (T_L) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event (T_A).

SLACK - slack for the event ($T_L - T_E$)

LEGEND
A... ACTIVITY
C... CRITICAL ACTIVITY
D... DUMMY ACTIVITY
... BLANK INDICATING NO CHANGE OF ACTIVITY ON 363 MASTER FILE

UPDATE CODE	EVENT PRED	EVENT SUCC	ACTIVITY DESCRIPTION	ACCOUNT NO.	ORG	MILES STONE CODE	AMOUNT DATE	ALT TIME	VARIANCE ANGLE
A	10000	10000	DUMMY NETWORK START EVENT						
	1499		1 0						
A	10000	10100	DUMMY NETWORK START				A10/10/00	0	+0
A	10100	10190	23A REQMTS TO COMPETITIVE PROTO START						
	1492		1 9						
A	10100	10190	PREPARE REVISED DRAFT DCP					86	+0
A	10100	10200	CONTINUE BASELINE PREPARATION & ANALYSIS					304	+0
A	10190	10200	REVISED DRAFT DCP PREPARED						
	1192		1 9						
A	10100	10200	PREPARE FOR DSARC REVIEW OF STRATEGY					0	+0
A	10100	10210	FINAL DCP PREPARATION					120	+0
A	10200	10200	DSARC REVIEW COMPLETE						
	1112		0 0						
A	10200	10220	NOTIFICATION OF DECOR BY DECISION AUTH					106	+0
A	10210	10210	FINAL DCP 23A COMPLETED						
	1122		0 0						
A	10210	10220	FINAL DCP APPROVAL					20	+0
A	10220	10220	DCP 23A APPROVED BY DEPUTY SECDEF						
	1070		0 0						
A	10220	10230	PMD FINALIZATION					0	+0
A	10230	10230	PMD ISSUED						
	1142		0 0						
A	10230	10240	PROGRAM CONTROL FORMALIZATION					20	+0
A	10240	10240	A-E SPO FULLY ESTABLISHED						
	1192		0 0						
A	10240	10250	FINALIZE RFP					10	+0
A	10240	10250	GUR RFP PREPARATION					166	+0
A	10240	10270	BASELINE DATA PREP & PLANNING					1134	+0

A	10250	10250 RFP ISSUED TO INDUSTRY			
1162		1 0			
A	10250	10260 INDUSTRY PREPARES REPLY TO RFP	15%	-0	
A	10260	10260 RESPONSE TO RFP RECEIVED			
1172		1 1			
A	10260	10270 INDUSTRY REPLY EVALUATION	90	-0	
A	10270	10270 SSAC RECOMMENDATIONS DEFERRED TO SSA			
1182		1 0			
A	10270	10280 FINAL SOURCE SELECTION EVALUATION (P)	72	-0	
A	10280	10280 RFP FOR GUN ISSUED TO INDUSTRY			
1192		1 0			
A	10280	10290 INDUSTRY REPLY FORMULATION & EVALUATIONS	300	-0	
A	10290	10290 DSARC I			
1202		0 0			
A	10290	10300 DSARC I REVIEW & SELECTION	0	-0	
A	10300	10300 CONTRACTORS SELECTED FOR GUN PROTOTYPE			
1212		0 0			
A	10300	10310 FINAL CONTRACT PREPARATION	0	-0	
A	10300	10340 A-9ENGINE CONTRACT DEVELOPMENT	0.0	-0	
A	10310	10310 AUTHORIZATION TO AWARD CONTRACT			
1222		0 0			
A	10310	10320 PROTOTYPE ENGINEERING	60	-0	
A	10310	10340 A-9 ENGINE CONTRACT NEGOTIATIONS	950	-0	
A	10320	10320 PROTOTYPES DESIGNATED A-9 & A-10			
1232		0 0			
A	10320	10350 PROTOTYPE FABRICATION & MANUFACTURE A-10	50%	-0	
A	10330	10350 PROTOTYPE FABRICATION & MANUFACTURE A-9?	60%	-0	
A	10330	10330 GUN PROTOTYPING CONTRACTORS SELECTED			
1242		0 0			
A	10330	10400 GUN PROTOTYPE FABRICATION & MANUFACTURE?	0.2	-0	
A	10340	10340 A-9 ENGINE CONTRACT NEGOTIATED			
1252		0 0			
A	10340	10360 A-9 ENGINE FABRICATION & TEST	30%	-0	
A	10350	10350 A-10 FIRST FLIGHT			
1262		0 0			
A	10350	10380 A-10 PROTOTYPE FLIGHT EVALUATION	3.2	-0	
A	10360	10360 A-9 FIRST FLIGHT			
1272		1 1			
A	10360	10360 A-9 PROTOTYPE FLIGHT EVALUATION	10%	-0	

A	10370	10370 PROPOSAL INSTRUCTIONS FOR FSD RELEASED			
	1242	4 9			
A	10370	10420 BASIC CONTRACT DEVELOPMENT & PLANNING		730	-0
A	10380	10380 START AIR FORCE FLYOFF			
	1292	4 9			
A	10380	10390 AIR FORCE COMPETITIVE FLYOFF		60	-0
A	10390	10390 FLYOFF COMPLETED			
	1312	4 0			
A	10390	10400 FLYOFF RESULTS EVALUATION		56	-0
A	10400	10400 OSD/DC II			
	1312	2 0			
A	10400	10410 REVIEW & RATIFICATION BY SSA		2	-0
A	10410	10410 A-10 SELECTED FOR FSD			
	1322	2 0			
A	10410	10420 FSD CONTRACT PREPARATION & NEGOTIATION		60	-0
A	10410	10430 ENGINES CONTRACT PREP & NEGOTIATION		90	-0
A	10420	10420 CONTRACT AWARD TO PRC FOR FSD			
	1332	0 0			
A	10420	10430 PREPRODUCTION DESIGN MODIFICATIONS		90	-0
A	10420	10840 TOOL PLANNING DESIGN & MANUFACTURE		184	-0
A	10420	10440 WIND TUNNEL DRAG TESTS		110	-0
A	10420	10670 CONDUCT STATIC ARTICLE TESTS		1102	-0
A	10420	10660 FATIGUE ARTICLE TEST PLANNING		352	-0
A	10420	10725 STRESS TEST DESIGN MODIFICATIONS		96	-0
A	10420	10730 MISC TEST PLANNING		80	-0
-	10420	10770 PREPARE VENDOR SPECS		52	-0
A	10420	10840 DETERMINE PRELIM DESIGN LOADS		90	-0
A	10420	10870 GUN LOCATION DETERMINATION		184	-0
A	10420	10890 PREPARE AVIONICS ORDERS		294	-0
A	10420	10910 INITIAL COST VERIFICATION		840	-0
A	10420	10920 CONTRACT MONITORING & PLANNING		462	-0
A	10420	10960 SPECIFICATION UPDATING		90	-0
A	10420	11010 PREPARE TRAINING PLANS		84	-0

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A	10430	10430 ENDING CONTRACT AWARD TO GE		
	1342	7 9		
A	10430	11140 PRELIM MODIFICATION TO ENGINE DESIGN	44	-0
A	10440	10440 GUN COMPETITIVE SHOOTOFF BEGINS		
	1352	1 8		
A	10440	10450 GUN COMPETITIVE FLYOFF	134	-0
A	10450	10450 GUN COMPETITIVE SHOOTOFF ENDS		
	1362	6 9		
A	10450	10460 GUN COMPETITIVE FLYOFF EVAL & SELECTION	66	-0
A	10460	10460 GE SELECTED FOR GUN FSD		
	1372	8 9		
A	10466	10470 FINAL CONTRACT PREP & NEGOTIATION	10	-0
A	10470	10470 CONTRACT AWARD TO GE FOR GUN		
	1382	1 9		
A	10470	11100 PRELIM MODIFICATION TO GUN DESIGN	82	-0
A	10480	10480 DESIGN LAYOUTS COMPLETE		
	1392	8 9		
A	10480	10490 FINALIZE MAJOR COMPONENT DESIGN	46	-0
A	10490	10490 MAJOR FORGING RELEASE		
	1402	3 8		
A	10490	10500 FINALIZE DESIGN	46	-0
A	10490	10910 MANUFACTURE AND DELIVER FORGINGS	170	-0
A	10560	10560 DESIGN FREEZE		
	1412	8 8		
A	10500	10520 PREPARE STRUCTURAL DRAWINGS	200	-0
A	10510	10510 RECEIVE FORGINGS		
	1422	3 9		
A	10510	10570 ASSEMBLE MAJOR COMPONENTS	80	-0
A	10520	10520 RELEASE STRUCTURAL DRAWINGS		
	1432	1 8		
A	10520	10530 PREPARE FINAL ASSEMBLY PLANS & JIGS	222	-0
A	10530	10530 STRUCTURAL ASSEMBLY MANUFACTURE		
	1442	1 9		
A	10530	10580 FINAL ASSEMBLY A/C #1	44	-0
A	10541	10540 TOOL PLANNING, DESIGN & MANUFACTURE COMP		
	1452	7 8		
A	10540	10550 TOOL RELEASE & SET-UP	44	-0
A	10550	10550 RELEASE TOOLS		
	1462	2 9		
A	10560	10560 DEVELOP MANUFACTURING DETAILS	44	-0

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A	10560	10560 MANUFACTURING DETAILS COMPLETE		
1972		: 0		
A	10560	10570 MANUFACTURE COMPONENTS	176	-0
A	10570	10530 ASSEMBLE SUBSTRUCTURE	304	-0
A	10570	10670 STRUCTURAL ASSEMBLY COMP		
1982		5 5		
A	10610	10560 FINAL ASSEMBLY A/C #1 COMPLETE		
1992		: 9		
A	10560	10590 GROUND TESTING	66	-0
A	10590	10590 GROUND TEST COMPLETE		
1972		: 9		
A	10590	10600 PREPARATION FOR FIRST FLIGHT	83	-0
A	10600	10600 FIRST FLIGHT A/C #1 (PREPROD)		
1512		0 0		
A	10600	10610 PREPRODUCTION AIRCRAFT CONSTRUCTION	485	-0
A	10600	10620 INITIAL AIRCRAFT TESTING & DELIVERY	62	-0
A	10610	10610 DELIVER A/C #10 (PREPROD)		
1932		0 0		
A	10610	10620 DELIVERY & TEST OF LAST PREPROD A/C	672	-0
A	10610	11200 MANUFACTURE PRODUCTION A/C # 1	15	-0
A	10620	10620 START BTSE TESTING		
1932		0 0		
A	10620	10630 BTSE OF PREPRODUCTION AIRCRAFT	1035	-0
A	10630	10630 COMPLETE BTSE TESTING		
1942		0 0		
A	10630	11200 --DUMMY--	0	-0
A	10640	10640 COMPLETE WIND TUNNEL TESTS		
1962		0 0		
A	10640	10650 STORE SEPARATION TESTS	822	-0
A	10650	10650 STORE SEPARATION TEST COMPLETE		
1962		: 9		
A	10650	10660 FLUTTER TESTS	840	-0
A	10660	10660 --DUMMY--	0	-0
A	10660	10660 COMPLETE FLUTTER TESTS		
1972		: 9		
A	10670	10630 --DUMMY--	0	-0
A	10670	10670 STATIC ARTICLE TESTS COMPLETE		
1962		: 2		
A	10660	10660 FATIGUE ARTICLE TEST PLANNING COMP		
1992		0 0		

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A	10680	10680 FATIGUE ARTICLE FABRICATION & ASSEMBLY	442	-0
A	10690	10690 FINAL ASSEMBLY COMPLETE		
11-2		: :		
A	10690	10700 FATIGUE TESTING	344	-0
A	10700	10700 2 LIFETIME FATIGUE TESTING COMP		
1012		7 7		
A	10700	10710 FATIGUE TESTING CONTINUES	222	-0
A	10710	10710 2 LIFETIMES FATIGUE TESTING COMP		
1022		8 7		
A	10710	10720 FATIGUE TESTING CONTINUES	352	-0
A	10720	10630 --DUMMY--	0	-0
A	10720	10720 4 LIFETIMES FATIGUE TESTING COMP		
1032		8 7		
A	10725	10725 CORFST TESTS DESIGN MODS COMP		
1052		9 8		
A	10725	10730 CORCSS STRUCTURAL TESTS	352	-0
A	10730	10730 CORESS STRUCTURAL TESTS COMP		
1042		8 8		
A	10730	10740 CORESS TRACK TESTS	224	-0
A	10740	10600 --DUMMY--	0	-0
A	10740	10740 CORESS TRACK TESTS COMP		
1062		8 8		
X	10750	10750 MISC TEST PLANNING COMP		
1072		8 8		
A	10750	10750 CONDUCT MISC TESTS	1504	-0
A	10760	10630 --DUMMY--	0	-0
A	10760	10760 MISC TESTS COMPLETE		
1082		8 8		
A	10770	10770 RELEASE VENDOR SPECS		
1092		: 7		
A	10770	10780 --DUMMY--	0	-0
A	10770	10790 VENDOR REPLY & EVALUATION	66	-0
A	10780	10780 ISSUE RFQ		
1102		: 7		
A	10790	10800 PREPARE VENDOR CONTRACT	75	-0
A	10790	10790 SELECT VENDOR		
1112		8 8		
A	10790	10800 FINAL CONTRACT NEGOTIATIONS	33	-0
A	10790	10810 PREPARE INSTALLATION DRAWINGS	440	-0

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A      10000   10000 ISSUE PURCHASE ORDER

  1722             0     0
A      10000   10000 MANUFACTURE & TEST :COMPONENTS                    542   -0
A      10010   10010 --DUMMY--                                          0   -0
A      10010   10010 RELEASE INSTALLATION DRAWINGS

  1732             :     0
A      10010   10020 MANUFACTURE & TEST COMPONENTS                     112   -0
A      10020   10030 --DUMMY--                                          0   -0
A      10020   10020 QUALIFICATION TESTS COMPLETE

  1742             0     0
A      10030   10030 INSTALL COMPONENTS                                 60   -0
A      10030   10030 RECEIVE COMPONENTS

  1752             0     0
A      10040   10040 --DUMMY--                                          0   -0
A      10040   10040 PRELIM DESIGN LOADS & CRITERIA SET

  1762             0     0
A      10040   10050 DETERMINE FINAL DESIGN LOADS                      352   -0
A      10050   10520 --DUMMY--                                          0   -0
A      10050   10050 FINAL DESIGN LOADS & CRITERIA SET

  1772             0     0
A      10050   10060 VIBRATION & ACOUSTIC ANALYSIS                     356   -0
A      10060   10630 --DUMMY--                                          0   -0
A      10060   10060 VIBRATION & ACOUSTIC ANALYSIS COMPLETE

  1782             0     0
A      10070   10070 GUN LOCATION FREEZE

  1792             0     0
A      10070   10080 PREPARE GUN INSTALLATION DRAWING                  434   -0
A      10080   10590 GUN GROUNDCHECKS                                  222   -0
A      10600   10600 GUN INSTALLATION DRAWING COMPLETE

  1812             :     1
A      10090   10090 AVIONICS LONG LEAD ORDERS RELEASED

  1812             1     1
A      10090   10100 AVIONICS INTEGRATION & TESTING                    602   -0
A      10090   11060 NEGOTIATE ORDER                                    22   -0
A      10100   10100 --DUMMY--                                          0   -0
A      10100   10100 AVIONICS INTEGRATION & TESTING COMPLETED

  1822             1     1
A      10110   10110 DESIGN TO COST GOAL COMPLETE

  1832             0     0
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A	10910	11200 REVISH PRELIM FSD DATA			
A	10910	11330 PREPARE LONG LEAD ORDER #1	142	-0	
A	10920	10920 PDR	384	-0	
1042		0 9			
A	10920	10930 CONTRACT MONITORING & PLANNING			
A	10930	10930 PMR	130	-0	
1052		0 9			
A	10930	10940 CONTRACT MONITORING & PLANNING			
A	10940	10940 CDR	46	-0	
1062		1 9			
A	10940	10950 CONTRACT MONITORING & PLANNING			
A	10950	10950 CONTRACT MONITORING & PLANNING	342	-0	
A	10950	10950 SAFETY INSPECTION	44	-0	
1072		1 9			
A	10960	10960 SPEC UPDATE			
1082		0 9			
A	10960	10970 DETERMINE GUN INTERFERENCE DATA			
A	10970	10970 PRELIM GUN INTERFERENCE DATA COMP	130	-0	
1092		0 0			
A	10970	10980 ARMOR ANALYSIS			
A	10980	10980 ARMOR ANALYSIS COMPLETE	202	-0	
1002		0 0			
A	10980	10990 VULNERABLE AREA ANALYSIS			
A	10990	10990 VULNERABLE AREA ANALYSIS	502	-0	
1012		1 0			
A	10990	11000 DETERMINE FINAL GUN INTERFERENCE DATA			
A	11000	10630 --[illegible]--	304	-0	
A	11000	11000 FINAL GUN INTERFERENCE SPEC	0	-0	
1022		2 9			
A	11010	11010 TRAINING PLANS COMPLETE			
1032		1 9			
A	11010	11020 PRELIM DESIGN OF FORMAL PAINT TRAIN SYST			
A	11020	11020 FORMAL MTS DESIGN	130	-0	
1042		1 1			
A	11020	11030 FINAL MTS DESIGN			
A	11030	11030 MTS DESIGN FREEZE	220	-0	
1052		0 0			
A	11030	11040 FINALIZE MTS DESIGN DETAILS			
A	11040	11040 MTS PDR	176	-0	
1062		1 0			

UNCLASSIFIED

A	11040	11040 MTS PLANNING & DESIGN REVIEW	110	-0
A	11050	11050 MTS CDR		
1972				
A	11050	11060 MTS CONSTRUCTION	502	-0
A	11060	11060 MTS PCA/FCA		
1982				
A	11060	11070 MTS FINAL DETAILING & DELIVERY	40	-0
A	11070	10630 --[illegible]--	0	-0
A	11070	11070 DELIVERY OF MTS		
1992				
A	11080	11080 CPIC ORDERED		
2002				
A	11080	11080 MANUFACTURE & DELIVER AVIONICS	702	-0
A	11090	10580 INSTALL AVIONICS	132	-0
A	11090	11090 CPIC RECEIVED		
2012				
A	11100	11100 GUN PDR		
2022				
A	11100	11110 PREPRODUCTION GUN FABRICATION	186	-0
A	11110	11110 INITIAL PHASE I GUN		
2032				
A	11110	11120 FINALIZE GUN DESIGN	410	-0
A	11120	11120 GUN CDR		
2042				
A	11120	11130 TEST & QUALIFY GUN	216	-0
A	11130	10630 --[illegible]--	0	-0
A	11130	11130 GUN QUAL TESTS COMPLETE		
2052				
A	11130	12080 CONTINUING GUN PRODUCTION & DELIVERY	1200	-0
A	11140	11140 INITIAL HARDWARE DESIGN COMP		
2062				
A	11140	11150 FINALIZE ENGINE DESIGN	112	-0
A	11150	11150 ENGINE CDR		
2072				
A	11150	11160 PRELIM ENGINE TESTING	304	-0
A	11160	11160 AEDC ENGINE EXPLORATORY TESTS COMP		
2082				
A	11160	11170 ENGINE QUALIFICATION TESTING	304	-0
A	11170	11170 AEDC QUAL TESTS COMP		
2092				

UNCLASSIFIED

A	11170	11180	PREPRODUCTION ENGINE FABRICATION	44	-0
A	11170	11190	ENGINE QUALIFICATION TESTING	124	-0
A	11191	11180	RECEIVE ENGINE #1		
2112					
A	11180	11190	PREPRODUCTION ENGINE TESTING	44	-0
A	11190	10630	--SUMMY--	0	-0
A	11190	11190	MOT APPROVAL		
2112					
A	11190	12060	CONTINUING ENGINE PRODUCTION & DELIVERY	124.	-0
A	11200	11200	DSARC IIIA		
2122					
A	11200	11210	CERTIFICATION OF DSARC RECOMMENDATIONS	32	-0
A	11210	11210	AUTHORIZATION FOR INITIAL PRODUCTION		
2132					
A	11210	11220	AUTHORITY LONG LEAD ORDER	134	-0
A	11215	11215	DSARC IIIB		
2142					
A	11215	11270	CERTIFICATION OF DSARC RECOMMENDATIONS	28	-0
A	11220	11220	LONG LEAD ITEMS OPT 1 FUNDING PERT		
2152					
A	11220	11230	PREPARE LONG LEAD ORDER #2	376	-0
A	11220	11250	--SUMMY--	0	-0
A	11230	11230	LONG LEAD ITEMS OPT 2 FUNDING PERT		
2162					
A	11230	11240	PROGRAM COST VERIFICATION	36	-0
A	11240	11215	REVIEW OF FSD DATA	232	-0
A	11240	11240	DESIGN TO COST DEMO		
2172					
A	11240	11250	REVIEW OF TEST DATA	90	-0
A	11250	11250	PCA		
2182					
A	11250	11260	REVIEW OF FSD DATA	44	-0
A	11260	11215	PREPARATION FOR DSARC REVIEW	84	-0
A	11260	11260	PCA		
2192					
A	11270	11270	FOF&E PROGRAM START		
2212					
A	11270	11280	FOF&E	320	-0

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A	11280	11280 REFAS PROGRAM END (Phase I)		
2212		(0		
A	11280	11300 INITIAL OPERATIONAL CADRE TRAINING & DUAL	320	-0
A	11290	11270 IOT&E	210	-0
A	11290	11290 1ST PRODUCTION A/C DELIVERY		
2222		(1		
A	11290	11310 GROUP TEST & TRAINING UNITS	770	-0
A	11290	12000 CONTINUING AIRCRAFT PRODUCTION	660	-0
A	11300	11300 OPERATIONAL UNIT IOC		
2232		1 0		
A	11300	12000 --DUMMY--	0	-0
A	11310	11300 FINAL PREPARATION & COORDINATION	224	-0
A	11310	11310 INTAF ACTIVATED		
2242		1 1		
A	12000	12000 DUMMY NETWORK END		
2200		0 0		

UNCLASSIFIED

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS
CONTRACT NO. 001

WEAPONS SYS ACQ METHOD
1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (ES)

TERM= MSA 10 YEAR CAL
REPORT DATE= 1/01/69
RELEASE DATE=1/01/69

	EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
	10000	10180	SUPPLY NETWORK START	0.0			12/1/69	A1C/10/69	0.0	--	
I	10180	10190	PREPARE REVISED DRAFT DCP	8.6	12/12/69	12/12/69			0.0	8.6	
I	10180	10240	CONTINUE BASELINE PREPARATION & ANALYSIS	26.4	4/21/70	4/27/70			1.0	25.4	
	10130	10200	RELEASE FOR OSD/BC REVIEW OF STRATEGY	0.0	12/16/69	12/12/69			0.0	0.0	
	10190	10210	FINAL DCP PREPARATION	13.6	3/17/70	3/12/70			0.4	21.6	
	10200	10220	RATIFICATION OF SECOM BY DECISION AUTH	15.6	4/ 9/70	4/ 9/70			0.0	24.0	
	10210	10220	FINAL DCP APPROVAL	0.0	4/ 9/70	4/ 9/70			0.0	24.0	
	10220	10230	RMC FINALIZATION	9.0	4/15/70	4/15/70			0.0	33.0	
	10230	10240	PREPARE CHARTER FORMALIZATION	1.6	4/27/70	4/27/70			0.0	27.4	
	10240	10250	FINAL IOC REQ	1.0	5/ 8/70	5/ 4/70			0.0	29.2	
	10240	10280	GUN REQ PREPARATION	16.6	8/21/70	12/ 3/70			14.2	44.0	
	10240	10370	FACILITY DATA PREP & PLANNING	113.4	7/10/72	8/ 7/72			3.2	144.8	
	10250	10260	INDUSTRY PREPARES REPLY TO RFP	13.6	6/12/71	8/12/70			0.0	42.6	
	10260	10270	INDUSTRY REPLY EVALUATION	9.8	12/22/70	12/22/70			0.0	52.6	
	10270	10290	FINAL SOURCE SELECTION EVALUATION (P)	7.2	12/15/71	12/15/70			0.0	59.8	
	10280	10330	INDUSTRY REPLY FORMULATION & EVALUATION	35.0	7/2/71	8/ 9/71			14.2	73.2	
	10290	10300	SOURCE SELECTION & REVIEW & SELECTION	6.2	12/16/70	12/15/70			0.0	6.2	
	10300	10310	FINAL CONTRACT PREPARATION	1.8	12/22/70	12/22/70			0.0	8.0	
	10300	10340	A-9 SENSOR CONTRACT DEVELOPMENT	54.4	1/14/72	1/13/72			1.4	114.4	
	10310	10320	PROTOTYPE ENGINEERING	9.2	2/26/71	3/ 9/71			0.6	7.6	
	10310	10340	A-9 ENGINE CONTRACT NEGOTIATIONS	55.0	1/19/72	1/13/72			0.0	119.8	
	10320	10350	PROTOTYPE FABRICATION & MANUFACTURE A-10	62.4	5/15/72	5/10/72			0.6	133.4	
	10320	10360	PROTOTYPE FABRICATION & MANUFACTURE A-9B	65.2	6/ 5/72	6/12/72			1.0	135.2	
	10330	10440	GUN PROTOTYPE FABRICATION & MANUFACTURE	84.2	12/22/72	8/ 8/72			14.2	163.2	
	10340	10360	A-9 ENGINE FABRICATION & TEST	21.4	6/12/72	6/12/72			0.0	135.2	
	10350	10380	A-10 PROTOTYPE FLIGHT EVALUATION	21.2	1/16/72	1/13/72			0.6	153.6	
	10360	10380	A-9 PROTOTYPE FLIGHT EVALUATION	16.6	1/19/72	1/13/72			0.0	154.2	
	10370	10420	BASIC CONTRACT DEVELOPMENT & PLANNING	29.6	2/ 9/73	3/ 5/73			3.2	169.8	
	10380	10390	AIR FORCE COMPETITIVE FLYOFF	6.8	12/ 7/72	12/ 7/72			0.0	161.0	
	10390	10400	FLYOFF RESULTS EVALUATION	5.8	1/19/73	1/19/73			0.0	166.6	
	10400	10410	REVIEW & RATIFICATION BY SSA	8.2	1/22/73	1/22/73			0.0	167.1	
	10410	10420	FSE CONTRACT PREPARATION & NEGOTIATION	8.6	3/ 5/73	3/ 5/73			0.0	173.0	
	10410	10430	ENGINE CONTRACT PREP & NEGOTIATION	6.6	3/ 5/73	12/ 8/72			30.4	173.0	
	10420	10480	PREPRODUCTION DESIGN MODIFICATIONS	9.6	5/11/73	6/ 8/73			4.0	182.6	
	10420	10540	TOOL PLANNING DESIGN & MANUFACTURE	18.4	7/13/73	7/13/73			0.0	191.4	
	10420	10640	WIND TUNNEL DRAG TESTS	11.4	5/21/73	1/18/74			33.4	184.0	
	10420	10670	CONDUCT STATIC ARTICLE TESTS	110.2	7/ 1/75	3/ 1/77			85.0	491.2	
	10420	10680	FATIGUE ARTICLE TEST PLANNING	26.2	9/ 7/73	4/30/74			32.6	153.2	
	10420	10725	EGRESS TEST DESIGN MODIFICATIONS	6.0	4/16/73	1/ 7/74			38.8	179.0	
	10420	10750	MISS TEST PLANNING	2.6	3/19/73	1/17/74			42.2	175.0	

P.E.R./TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS
CONTRACT NO. 001

WEAPONS SYS ACQ NETWORK
1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LATEST SLACK
4TH SORT KEY EXPECTED DATE (YES)

TEAM- NSA 19 YEAR CAL
REPORT DATE- 10/1/69
RELEASE DATE-10/1/69

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
10420	10770	PREPARE VENDOR SPECS		1.2	3/13/73	4/12/73		4.4	174.2	
10420	10840	DETERMINE PRELIM DESIGN LOADS		9.2	6/ 8/73	6/ 8/73		4.4	182.2	
10420	10870	GUN LOCATION DETERMINATION		10.4	7/13/73	8/15/73		4.6	191.4	
10420	10890	PREPARE AVIONICS ORDERS		25.4	7/27/73	8/31/73		4.8	193.4	
10420	10910	INITIAL COST VERIFICATION		54.6	3/27/74	8/ 9/74		19.0	227.6	
10420	10920	CONTRACT MONITORING & PLANNING		46.2	12/[illegible]3	[illegible]/18/74		4.2	213.2	
10420	10960	SPECIFICATION UPDATING		9.0	6/ 7/73	12/ 6/74		80.4	186.6	
10420	11010	PREPARE TRAINING PLANS		4.6	4/ 5/73	11/ 6/74		80.8	177.6	
10430	11140	PRELIM MODIFICATION TO ENGINE DESIGN		4.6	4/ 5/73	11/ 9/73		30.4	177.6	
10440	10450	GUN COMPETITIVE FLYOFF		13.8	4/ 2/73	7/13/73		14.2	177.6	
10450	10460	GUN COMPETITIVE FLYOFF EVAL & SELECTION		8.8	6/ 4/73	9/13/73		14.2	189.6	
10460	10470	FINAL CONTRACT PREP & NEGOTIATION		1.0	6/11/73	9/23/73		14.2	188.8	
10470	11100	PRELIM MODIFICATION TO GUN DESIGN		8.2	8/ 6/73	11/13/73		14.2	195.0	
10480	10490	FINALIZE MAJOR COMPONENT DESIGN		4.6	6/13/73	7/12/73		4.0	187.2	
10490	10500	FINALIZE DESIGN		4.6	7/17/73	8/14/73		4.0	191.6	
10490	10610	MANUFACTURE AND DELIVER FORGINGS		17.6	11/16/73	12/24/73		5.2	244.8	
10500	10520	PREPARE STRUCTURAL DRAWINGS		30.4	2/21/74	3/21/74		4.8	222.2	
10610	10970	ASSEMBLE MAJOR COMPONENTS		4.8	11/15/73	1/23/74		9.2	218.9	
10520	10530	PREPARE FINAL ASSEMBLY PLANS & JIGS		22.2	7/3[illegible]/74	9/27/74		4.0	244.4	
10530	10580	FINAL ASSEMBLY A/C #1		4.4	9/27/74	9/27/74		0.0	252.8	
10540	10550	TOOL RELEASE & SET-UP		4.4	1/14/73	3/14/73		0.0	195.6	
10550	10560	DEVELOP MANUFACTURING DETAILS		4.4	9/14/73	9/14/73		0.0	210.2	
10560	10570	MANUFACTURE COMPONENTS		17.8	1/23/74	1/23/74		0.0	218.1	
10570	10530	ASSEMBLE SUBSTRUCTURE		31.4	8/27/74	8/27/74		0.0	240.4	
10580	10590	GROUND TESTING		0.8	12/ 2/74	12/ 2/74		0.0	261.6	
10590	10600	PREPARATION FOR FIRST FLIGHT		2.0	12/16/74	12/16/74		0.0	263.6	
10610	10620	PREPRODUCTION AIRCRAFT CONSTRUCTION		62.6	1[illegible]/16/75	11/16/75		0.0	306.2	
10600	10620	INITIAL AIRCRAFT TESTING & DELIVERY		8.2	2/13/75	2/28/75		1.8	271.0	
10610	10630	DELIVERY & TEST OF LAST PREPROD A/C		57.2	7/ 9/77	7/ 1/77		2.8	373.4	
10610	11290	MANUFACTURE PRODUCTION A/C # 1		1.6	1 /28/75	11/28/75		0.0	307.4	
10620	10630	RISK OF PREPRODUCTION AIRCRAFT		102.6	2/16/77	7/ 1/77		1.8	374.4	
10630	11280	--DUMMY--		0.0	2/16/77	3/ 1/77		1.8	374.4	
10640	10650	STORE SEPARATION TESTS		22.2	1 /29/73	6/[illegible]/74		33.4	206.2	
10650	10660	FLUTTER TESTS		24.4	6/18/74	12/16/74		33.4	230.2	
10660	10600	--DUMMY--		1.0	6/18/74	12/16/74		33.4	231.2	
10670	10630	--DUMMY--		0.0	7/ 1/75	3/ 1/77		85.0	491.2	
10660	10690	FATIGUE ARTICLE FABRICATION & ASSEMBLY		61.2	11/21/74	7/15/75		32.6	261.4	
10690	10700	FATIGUE TESTING		34.8	7/31/75	3/22/76		32.6	295.2	
10700	10710	FATIGUE TESTING CONTINUES		22.2	1/ 6/76	8/26/76		32.6	317.4	
10710	10720	FATIGUE TESTING CONTINUES		26.2	7/ 9/76	3/ 1/77		32.6	343.6	

PERT/TIME
ACTIVITY REPORT

WEAPONS SYS ACQ NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 001

TERM- WSA 1. YEAR CAL
REPORT DATE- 10/15/75
RELEASE DATE-10/15/75

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (EE)

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
10720	10630	--DUMMY--		0.0	7/ 9/76	3/ 1/77		32.6	346.6	
10725	10730	FIRE & STRUCTURAL TESTS		26.2	11/22/73	7/11/74		36.6	2[illegible]2	
10730	10740	FIRES TANK TESTS		21.8	3/27/74	12/13/74		36.6	2[illegible]	
10740	10600	--DUMMY--		0.0	3/27/74	12/16/74		36.6	227.6	
10750	10760	CONDUCT MISC TESTS		159.6	1/ 4/76	3/ 1/77		42.2	334.0	
10760	10630	--DUMMY--		0.0	1/ 4/75	3/ 1/77		42.2	334.0	
10770	10780	--DUMMY--		0.0	3/13/73	6/12/73		4.4	174.2	
10770	10790	VENDOR REPLY & EVALUATION		5.0	6/24/73	6/24/73		4.4	18[illegible].2	
10780	10800	PREPARE VENDOR CONTRACT		7.0	6/ 1/73	6/ 1/73		4.4	181.2	
10790	10800	FINAL CONTRACT NEGOTIATIONS		1.0	6/ 1/73	6/ 1/73		4.4	181.2	
10790	10810	PREPARE INSTALLATION DRAWINGS		56.6	5/21/74	9/27/74		13.6	234.8	
10800	10830	MANUFACTURE & TEST COMPONENTS		50.2	6/24/74	7/25/74		4.4	239.4	
10810	10530	--DUMMY--		0.0	5/21/74	8/27/74		13.6	234.8	
10810	10820	MANUFACTURE & TEST COMPONENTS		11.2	8/ 9/74	3/ 1/77		130.2	246.0	
10820	10630	--DUMMY--		0.0	8/ 9/74	3/ 1/77		130.2	246.0	
10830	10840	INITIAL COMPONENTS		9.0	5/27/74	9/27/74		4.4	240.4	
10840	10490	--DUMMY--		0.0	5/ 6/73	6/ 9/73		4.4	182.2	
10490	10450	DETERMINE FINAL DESIGN LOADS		35.2	1/16/74	3/21/74		8.8	217.4	
10850	10620	--DUMMY--		0.0	1/16/74	3/21/74		8.8	217.4	
10850	10860	VIBRATION & ACOUSTIC ANALYSIS		36.8	9/24/74	3/ 1/77		124.0	252.2	
10860	10630	--DUMMY--		0.0	9/24/74	3/ 1/77		124.0	252.2	
10870	10880	PREPARE GUN INSTALLATION DRAWING		63.4	5/21/74	8/26/74		4.6	234.8	
10870	10590	GUN GROUNDCHECKS		22.2	11/28/74	12/ 2/74		4.6	267.2	
10890	10900	AVIONICS INTEGRATION & TESTING		55.2	11/ 7/74	12/16/74		5.0	25[illegible].6	
10880	11080	LONG LEAD ORDER		2.2	6/13/73	9/17/73		4.8	19[illegible].6	
10900	10600	--DUMMY--		0.0	11/ 7/74	12/16/74		5.0	255.6	
10910	11200	REVIEW SUPPLY FSD DATA		14.2	11/ 8/74	11/21/74		19.0	241.2	
10910	11220	PREPARE LONG LEAD ORDER #1		36.8	11/ 1/74	3/[illegible]/75		19.0	257.8	
10920	10930	CONTRACT MONITORING & PLANNING		13.8	3/21/74	4/13/74		4.2	226.2	
10930	10940	CONTRACT MONITORING & PLANNING		6.6	7/13/74	9/12/74		4.2	23[illegible].9	
10940	10950	CONTRACT MONITORING & PLANNING		26.2	11/14/74	11/13/75		4.2	25[illegible]	
10950	10600	CONTRACT MONITORING & PLANNING		4.4	11/1-/74	12/16/74		4.2	259.4	
10960	10970	DETERMINE GUN INTERFERENCE DATA		11.8	7/25/73	2/[illegible]/75		80.4	193.[illegible]	
10970	10980	ARMOR ANALYSIS		20.2	12/16/73	7/18/75		80.4	213.2	
10980	10990	VULNERABLE AREA ANALYSIS		22.2	12/31/74	7/30/75		80.4	265.4	
10990	11000	DETERMINE FINAL GUN INTERFERENCE DATA		30.4	5/ 4/75	3/ 1/77		80.4	295.8	
11000	10630	--DUMMY--		0.0	5/ 4/75	3/ 1/77		80.4	295.8	
11010	11020	PRELIM DESIGN OF FORMAL MAINT TRAIN S/S#		13.8	7/ 9/73	2/11/75		80.8	190.6	
11020	11030	FINAL MTS DESIGN		22.0	12/13/73	7/17/75		80.8	212.6	
11030	11040	FINALIZE MTS DESIGN DETAILS		17.0	4/15/74	11/17/75		80.8	229.6	

PERT/TIME
ACTIVITY REPORT

WEAPONS SYS AEO NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 811

TERM- MSA 10 YEAR CAL
REPORT DATE- 10/1./69
RELEASE DATE-10/1./69

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (YY)

EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	UNC.
11040	11050	HTS PLANNING & DESIGN REVIEW		11.6	7/ 2/74	2/ 5/75		80.8	240.6	
11050	11060	HTS CONSTRUCTION		54.2	4/27/75	1/27/77		80.8	491.8	
11060	11070	HTS FINAL DETAILING & DELIVERY		4.6	7/31/75	3/ 1/77		80.8	295.4	
11070	10830	--DUMMY--		0.0	7/31/75	3/ 1/77		80.8	295.4	
11080	11090	MANUFACTURE & DELIVER AVIONICS		39.2	5/21/76	6/25/79		4.8	234.6	
11090	10680	INITIAL AVIONICS		19.2	6/23/76	9/27/79		4.8	244.6	
11100	11110	PRE-PRODUCTION GUN FABRICATION		15.6	11/29/73	3/13/74		14.2	21 .6	
11110	11120	FEASIBLE GUN DESIGN		11.2	9/15/74	12/ 8/75		14.2	252.4	
11120	11130	TEST & QUALIFY GUN		21.6	2/28/75	5/11/77		14.2	274.2	
11130	10830	--DUMMY--		0.0	2/28/75	3/ 1/77		102.8	274.2	
11130	12000	CONTINUING GUN PRODUCTION & DELIVERY		126.0	7/ 6/77	11/17/77		14.2	334.2	
11140	11150	FEASIBLE ENGINE DESIGN		11.2	6/25/73	1/31/74		30.4	191.8	
11150	11160	BEGIN ENGINE TESTING		39.8	4/ 8/74	11/ 3/75		30.4	227.8	
11160	11170	ENGINE QUALIFICATION TESTING		16.8	7/31/74	3/ 6/75		30.4	244.4	
11170	11180	PRE-PRODUCTION ENGINE FABRICATION		4.6	7/31/74	4/ 8/75		30.4	249.0	
11170	11190	ENGINE QUALIFICATION TESTING		12.0	11/23/74	6/13/75		81.8	250.4	
11180	11190	PREPRODUCTION ENGINE TESTING		8.8	11/ 1/74	6/13/75		30.4	258.8	
11190	10830	--DUMMY--		0.0	11/ 1/74	3/ 1/77		118.4	257.8	
11190	12000	CONTINUING ENGINE PRODUCTION & DELIVERY		126.6	3/11/77	11/17/77		30.4	377.8	
11200	11210	SATISFICATION OF DSARC RECOMMENDATIONS		3.2	7/31/74	12/13/74		19.0	244.4	
11210	11220	AUTHORIZE LONG LEAD ORDER		13.4	11/ 1/74	3/21/75		19.0	257.8	
11215	11270	SATISFICATION OF DSARC RECOMMENDATIONS		2.8	2/28/76	7/ 9/76		19.0	324.6	
11220	11230	PREPARE LONG LEAD ORDER #2		37.6	7/31/75	12/16/75		19.0	295.4	
11220	11290	--DUMMY--		0.0	11/ 1/74	11/28/75		50.0	257.8	
11230	11240	PROGRAM COST VERIFICATION		3.8	8/27/75	1/14/76		19.0	293.2	
11240	11215	REVIEW OF ESD DATA		23.2	2/12/76	6/24/76		19.0	322.4	
11240	11250	REVIEW OF TEST DATA		9.4	1 /31/75	3/31/76		80.8	312.2	
11250	11260	REVIEW OF ESD DATA		4.4	12/ 3/75	4/23/76		80.8	312.8	
11260	11215	PREPARATION FOR DSARC REVIEW		8.0	1/31/76	6/24/76		20.8	322.6	
11270	11280	FOTE		32.8	11/23/76	3/ 1/77		13.8	362.4	
11280	11300	INITIAL OPERATIONAL CADRE TRAINING & QUA		32.0	1/ 3/77	11/17/77		1.8	410.4	
11290	11270	IOTGE		21.8	4/ 2/76	7/ 6/76		13.8	329.6	
11290	11310	EQUIP TEST & TRAINING UNITS		77.8	7/29/77	7/29/77		0.0	384.8	
11290	12000	CONTINUING AIRCRAFT PRODUCTION		86.0	7/ 6/77	11/17/77		14.4	353.8	
11300	12000	--DUMMY--		0.0	10/17/77	10/17/77		0.0	410.2	
11310	11300	FINAL PREPARATION & COORDINATION		23.4	10/17/77	10/17/77		0.0	410.2	

PERT/TIME
MILESTONE REPORT

WEAPONS SYS ACQ METHOD | REPORTING ORGN. AFIT/LS | CONTRACT NO. 861 | TERM MSA 10 YEAR CAL | REPORT DATE= 1/21/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE=1/21/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10160	SSF MODIFIES TO COMPETITIVE PROTO STRAT	109				12/18/69	0.0
10190	REVISED WORK DCP PREPARED	110	12/12/69	12/12/69			0.0
10200	DSARC REVIEW COMPLETE	111	12/18/69	12/18/69			0.0
10210	FINAL DCP 218 COMPLETED	112	3/17/70	3/19/70			0.4
10220	DCP 218 APPROVED BY DEPUTY SECDEF	113	4/ 9/70	4/ 9/70			0.0
10230	RFP ISSUED	114	4/15/70	4/15/70			0.0
10240	A-X SPO FULLY ESTABLISHED	115	4/27/70	4/27/70			0.0
10250	RFP ISSUED TO INDUSTRY	116	5/ 8/70	5/ 8/70			0.0
10260	PROPOSALS TO SPO RECEIVED	117	8/12/70	8/12/70			0.0
10270	SCAP RECOMMENDATIONS BRIEFEDED TO SSA	118	10/22/70	1 /22/70			0.0
10280	RFP FOR GUN ISSUED TO INDUSTRY	119	8/21/71	12/ 3/70			14.2
10290	DSARC I	120	12/15/70	12/15/70			0.0
10300	CONTRACTORS SELECTED FOR COM PROTOTYPE	121	12/16/70	12/16/70			0.0
10310	AUTHORIZATION TO AWARD CONTRACT	122	12/22/70	12/22/70			0.0
10320	PROTOTYPES DESIGNATED A-9 & A-10	123	2/26/71	3/ 3/71			0.6
10330	GUN PROTOTYPING CONTRACTORS SELECTED	124	4/30/71	4/ 9/71			14.2
10340	A-9 ENGINE CONTRACT NEGOTIATED	125	1/19/72	1/19/72			0.0
10350	A-10 FIRST FLIGHT	126	5/15/72	5/18/72			2.6
10360	A-9 FIRST FLIGHT	127	6/12/72	6/12/72			0.0
10370	PROPOSAL INFRASTRUCTURE FOR FSD RELEASED	128	7/14/72	8/ 7/72			3.2
10380	START AIR FORCE FLYOFF	129	10/19/72	1 /15/72			0.0
10390	FLYOFF COMPLETED	130	12/ 7/72	12/ 7/72			0.0
10400	DSARC II	131	1/19/73	1/19/73			0.0
10410	A-10 SELECTED FOR FSD	132	1/22/73	1/22/73			0.0
10420	CONTRACT AWARD TO P&W FOR FSD	133	3/ 5/73	3/ 5/73			0.0
10430	ENGINE CONTRACT AWARD TO GE	134	3/ 5/73	1/ 8/73			3.0
10440	GUN COMPETITIVE SHOOTOFF BEGINS	135	12/22/72	4/ 4/73			14.2
10450	GUN COMPETITIVE SHOOTOFF ENDS	136	4/ 2/73	7/12/73			14.2
10460	GE SELECTED FOR GUN FSD	137	8/ 4/73	9/13/73			14.2
10470	CONTRACT AWARD TO GE FOR GUN	138	8/11/73	9/21/73			14.2
10480	DESIGN LAYOUTS COMPLETE	139	5/11/73	6/ 8/73			4.1
10490	MAJOR FORGING RELEASE	140	5/13/73	7/12/73			8.0
10500	DESIGN FREEZE	141	7/11/73	8/ 4/73			3.0
10510	RECEIVE FORGINGS	142	10/10/73	12/24/73			9.2
10520	RELEASE STRUCTURAL DRAWINGS	143	2/21/74	3/21/74			4.0
10530	STRUCTURAL ASSEMBLY MANUFACTURE	144	8/27/74	8/27/74			0.0
10540	TOOL PLANNING, DESIGN & MANUFACTURE COMP	145	7/13/73	7/13/73			0.0
10550	RELEASE TOOLS	146	8/14/73	8/14/73			0.0
10560	MANUFACTURING DETAILS COMLETE	147	9/14/73	9/14/73			0.0
10570	STRUCTURAL ASSEMBLY COMP	148	1/23/74	1/23/74			0.0

PERT/TIME
MILESTONE REPORT

WEAPONS SYS ACQ NETWORK | REPORTING ORGN. AFIT/LS | CONTRACT NO. F01 | TERM MSA 10 YEAR CAL | REPORT DATE- 1 /1 /69

LEVEL/SUMMARY ITEM 2

RELEASE DATE,11/11/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10580	FINAL ASSEMBLY A/C #1 COMPLETE	149	9/27/74	9/27/74			0.0
10590	GROUND TEST COMPLETE	151	12/ 2/74	12/ 2/74			0.0
10600	FIRST FLIGHT A/C #1 (DEVPROG)	15	12/16/74	12/16/74			0.0
10610	DELIVER A/C #1 (DEVPROG)	15	12/16/75	1 /16/75			0.0
10620	START OTEA TESTING	153	2/13/75	2/26/75			1.0
10630	COMPLETE OTEA TESTING	154	2/16/77	3/ 1/77			1.0
10650	STORE SEPARATION TEST COMPLETE	156	10/29/73	6/25/74			33.4
10660	COMPLETE FLUTTER TESTS	157	6/18/74	12/16/74			33.4
10670	STATIC ARTICLE TESTS COMPLETE	158	7/ 1/75	3/ 1/77			69.0
10680	FATIGUE ARTICLE TEST PLANNING COMP	159	9/ 7/73	1/31/74			32.8
10690	FINAL ASSEMBLY COMPLETE	16	11/21/74	7/15/75			32.0
10700	1 LIFETIME FATIGUE TESTING COMP	160	7/30/75	3/22/76			32.6
10710	2 LIFETIMES FATIGUE TESTING COMP	162	1/ 8/76	9/24/76			32.6
10720	4 LIFETIMES FATIGUE TESTING COMP	163	7/ 9/76	3/ 1/77			32.6
10730	EGRESS STRUCTURAL TESTS COMP	164	10/22/73	7/11/74			36.6
10735	EGRESS TESTS DESIGN MODS COMP	165	4/16/73	1/ 7/74			36.6
10740	EGRESS TRACK TESTS COMP	166	3/27/74	12/16/74			36.6
10750	MISC TEST PLANNING COMP	167	3/19/73	1/17/74			42.2
10760	MISC TESTS COMPLETE	168	5/ 4/76	3/ 1/77			42.2
10770	RELEASE VENDOR SPECS	169	3/13/73	4/12/73			4.4
10780	ISSUE RFQ	171	3/13/73	4/12/73			4.4
10790	SELECT VENDOR	174	4/24/73	5/24/73			4.4
10800	ISSUE PURCHASE ORDER	175	5/ 1/73	6/ 1/73			4.4
10810	RELEASE INSTALLATION DRAWINGS	177	5/21/74	8/27/74			13.6
10820	QUALIFICATION TESTS COMPLETE	176	8/ 9/74	3/ 1/77			134.2
10830	RECEIVE COMPONENTS	178	5/24/74	7/25/74			4.4
10840	PRELIM DESIGN LOADS & CRITERIA SET	179	5/ 6/73	6/ 8/73			4.4
10850	FINAL DESIGN LOADS & CRITERIA SET	177	1/18/74	3/21/74			8.8
10860	VIBRATION & ACOUSTIC ANALYSIS COMPLETE	178	3/24/74	3/ 1/77			124.6
10870	GUN LOCATOR FREEZE	173	7/13/73	8/15/73			4.6
10880	GUN INSTALLATION DRAWING COMPLETE	180	5/21/74	8/24/74			4.6
10890	AVIONICS LONG LEAD ORDERS RELEASED	181	7/27/73	8/24/73			4.4
10900	AVIONICS INTEGRATION & TESTING COMPLETED	182	11/ 7/74	12/16/74			5.0
10910	DESIGN TO COST DEMO COMPLETE	183	3/27/74	8/ 9/74			19.4
10920	PDR	184	12/18/73	1/18/74			4.2
10930	PFR	185	3/21/74	4/19/74			4.2
10940	CCR	186	6/23/74	7/22/74			4.2
10950	SAFETY INSPECTION	187	10/14/74	11/13/74			4.2
10960	SPEC UPDATE	188	5/ 7/73	12/ 6/74			83.4
10970	PRELIM GUN INTERFERENCE DATA COMP	189	7/25/73	2/25/75			84.4

PERT/TIME
MILESTONE REPORT

WEAPONS SYS ACQ NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. DF1 — TFRN NSA 1C YEAR CAL — REPORT DATE= 1./1./69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,1./1C/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10500	AIRFRAME ANALYSIS COMPLETE	190	12/16/73	7/18/75			[illegible]
10590	WIDE AREA A-FA ANALYSIS	191	12/31/74	7/26/76			[illegible]
11000	FINAL GUN INTERFERENCE SPEC	192	8/ 4/75	3/ 1/77			[illegible]
11010	TRAINING PLANS COMPLETE	193	4/ 5/73	11/ 6/74			[illegible]
11020	FSSNAL MTS DESIGN	194	7/ 9/73	2/11/75			[illegible]
11030	MTS D SIGN FREEZE	195	12/13/73	7/17/75			[illegible]
11040	MTS PDR	196	4/15/74	11/17/75			[illegible]
11050	MTS CDR	197	7/ 2/74	2/ 5/76			[illegible]
11060	MTS PCA/FCA	198	6/27/75	1/27/77			[illegible]
11070	DELIV BY OF MTS	199	7/31/75	3/ 1/77			[illegible]
11080	CFAF ORDERED	200	8/13/73	9/17/73			[illegible]
11090	CFAF DELIVER	201	5/21/74	6/25/74			[illegible]
11100	GUN PDR	202	8/ 8/73	11/19/73			14.2
11110	RECEIVE PHASE I GUN	203	11/29/73	3/12/74			14.2
11120	GUN CDR	204	3/25/74	1/ 8/75			14.2
11130	GUN QUAL TESTS COMPLETE	205	2/28/75	6/17/75			14.2
11140	ENGIN HARDWARE DESIGN COMP	206	4/ 5/73	11/ 9/73			[illegible]
11150	ENGIN CDR	207	6/25/73	1/31/74			[illegible]
11160	AEDC ENGINE EXPLORATORY TESTS COMP	208	4/ 2/74	11/ 5/74			[illegible]
11170	AEDC QUAL TESTS COMP	209	7/31/74	3/ 6/75			[illegible]
11180	FFFIFF ENGINE #1	210	8/30/74	4/ 8/75			[illegible]
11190	MCT APPROVAL	211	11/ 1/74	6/10/75			[illegible]
11200	DSARC IIIA	212	7/ 8/74	11/21/74			19.4
11210	AUTHORIZATION FOR INITIAL PRODUCTION	213	7/30/74	12/13/74			19.0
11215	DSARC IIIB	214	2/12/76	6/24/76			19.0
11220	LONG LEAD ITEMS OPT 1 FUNDING POINT	215	11/ 1/74	3/24/75			19.0
11230	LONG LEAD ITEMS OPT 2 FUNDING POINT	216	7/31/75	12/16/75			19.0
11240	DESIGN TO COST GOAL	217	8/27/75	1/14/76			19.0
11250	FCA	218	11/30/75	7/30/76			20.0
11260	PCA	219	12/ 3/75	7/29/76			20.0
11270	FFTEF PROGRAM START	220	4/ 2/76	7/ 8/76			13.0
11280	FFTEF PROGRAM END (PHASE II)	221	2/16/77	3/ 1/77			1.0
11290	1ST PRODUCTION A/C DELIVERY	222	10/28/75	1/22/76			0.0
11300	OPERATIONAL UNIT IOC	223	10/17/77	10/17/77			0.0
11310	SATAF ACTIVATED	224	4/29/77	4/29/77			0.0
10640	COMPLETE WIND TUNNEL TESTS	255	5/21/73	1/18/74			33.4

APPENDIX F

INTEGRATED ACQUISITION NETWORK

This appendix is composed of three parts. The first part is the update history, which lists each activity and event used in the network processing, as well as other data associated with an event or activity and used in the network processing. The column heading format for this part is as follows:

UPDATE CODE - indicates whether entry represents an addition, replacement, deletion or unchanged record. All update codes in this report are labeled A.

PRED - event which signals the start of an activity.

SUCC - event which indicates the completion of an activity (for an event it is the same number as in PREP).

DESCRIPTION - the activity or event description.

ACCOUNT - not used in this report.

ORG - organization code associated with an activity.

MILESTONE CODE - not used in this report.

ABRS DATE - the actual, scheduled, or required beginning or completion date assigned to an activity.

TIME - the activity time assigned to an activity, expressed in tenths of weeks.

VARIANCE - the computer program has mislabeled this column. The standard duration for an activity (σ_{t_e}) as calculated from its three time estimates (in weeks and tenths of weeks) is calculated and displayed.

The second part of this appendix is the activity report. The activity report displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory.

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time (t_e) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date (T_E) for completion of the activity.

ALLOWABLE DATE - latest allowable date (T_L) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date (T_A) is shown preceded by the letter A. If a required completion date has been specified, that date (T_R) is shown preceded by the letter R.

SLACK - slack for the activity (T_L - T_E)

TIME REMAINING - time from the report date until expected completion date (T_E) of the activity.

ORG - identification of the organization responsible for this activity.

The third part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date (T_E) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date (T_L) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event (T_A).

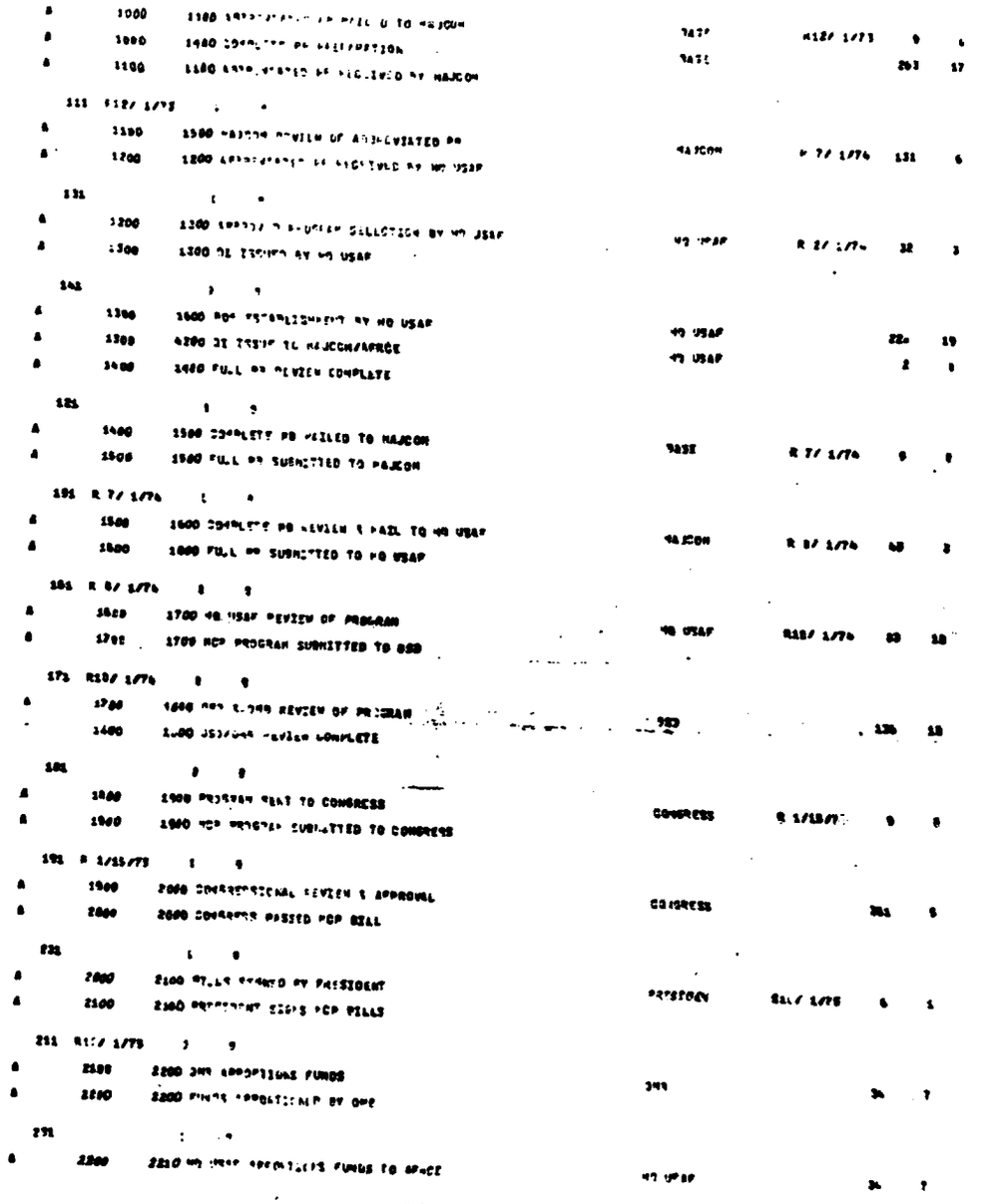
SLACK - slack for the event ($T_L - T_E$)

UNCLASSIFIED

Add = ADDITION OF ACTIVITY
Rese = RESCHEDULE OF ACTIVITY
Dele = DELETION OF ACTIVITY
*** ALERT INDICATING NO CHANGE OF ACTIVITY ON OLD MASTER FILE

UPDATE CODE	PROJ	EVENT CODE	ACTIVITY IDENTIFICATION	ACCOUNT NO.	ORG	ACTION STATUS CODE	APMS DATE	ACT TIME	VARIANCE
A	100	100	FACILITY REQUIREMENT DEFINED BY COMFR						
11									
A	100	200	FACILITY REQUIREMENTS SENT TO BASE		0347			0	0
A	200	200	BASE RPR AVAIL FACILITY REQ REPORT						
21									
A	200	300	FACILITY SURVEY		9A9E			44	2
A	200	3000	INITIAL ENVI-ENVIRONMENTAL EVALUATION		9A9E			48	5
A	300	300	FACILITY SURVEY COMPLETE						
31									
A	300	400	CONSTRUCTION PROGRAM DETERMINATION		9A3E			48	3
A	400	400	BASE RV APPROVED FACILITY CONSTR						
41									
A	400	500	INITIAL DOCUMENTATION DEVELOPMENT		9A3E			33	8
A	500	600	CALL RECEIVED FROM MAJCOM						
71									
A	600	700	INITIAL DD FORM 1391 DEVELOPMENT		9A3E			0	0
A	700	700	INITIAL 1391 COMPLETED						
881									
A	700	800	1391 RECEIPT & REVIEW BY MAJCOM		MAJCOM	R	8/15/73	66	7
A	700	1000	ANNOTATED PROJECT BOOK DEVELOPMENT		BASE			177	22
A	800	800	INITIAL DD FORM 1391 RECEIVED BY MAJCOM						
81	P 8/ 1/73								
A	800	900	PROGRAM AMENDMENT & FORWARD TO HQ USAF		MAJCOM	R	12/10/73	188	9
A	800	1100	MAJCOM REVIEW OF 1391		MAJCOM	R	12/ 1/73	66	4
A	900	900	INITIAL PROGRAM RECEIVED BY HQ USAF						
91	R11/15/73								
A	900	1200	PROGRAM REVIEW BY HQ USAF		HQ USAF			135	16
A	1000	1000	ANNOTATED PROJECT BOOK COMPLETED						
111									

UNCLASSIFIED



UNCLASSIFIED

A	2210	2210 FUNDS APPORTIONED BY HQ USAF			
241					
A	2210	6800 FINANCIAL PLANNING	AFCEC	51	4
A	2300	2300 IFB READY			
251					
A	2300	2400 CWE PREPARATION	AFCEC	16	2
A	2300	2500 BID ADVERTISEMENT, FORMULATION & RECEIPTS	AFCEC	63	2
A	2400	2400 CWE PREPARED			
261					
A	2400	2500 PREPARATION FOR AWARD	AFCEC	42	2
A	2500	2500 CONSTRUCTION BIDS PREPARED			
271					
A	2500	2600 BIDS OPENED, REVIEWED & APPROVED	AFCEC	18	1
A	2600	2600 CONTRACT AWARDED			
281					
A	2600	2800 PRECONSTRUCTION CONF PREPARATION	AFCEC	16	1
A	2800	2800 PRECONSTRUCTION CONFERENCE COMPLETE			
291					
A	2800	2900 FACILITY CONSTRUCTION	AFCEC	1033	13
A	2900	2900 FACILITY CONSTRUCTED			
301					
A	2900	3000 PRELIMINARY INSPECTION	AFCEC	10	0
A	3010	3000 PRELIMINARY INSPECTION COMPLETE			
311					
A	3010	3100 CORRECT INSPECTION DEFICIENCIES	AFCEC	66	7
A	3100	3100 DEFICIENCIES CORRECTED			
321					
A	3100	3200 FINAL INSPECTION	AFCEC	2	0
A	3200	3200 FINAL INSPECTION COMPLETE			
331					
A	3200	3300 FACILITY TRANSFER	AFCEC	0	1
A	3300	3300 FACILITY TRANSFER COMPLETE			
341					
A	3300	3400 EQUIPMENT INSTALLATION	BASE	66	7
A	3400	3400 EQUIPMENT INSTALLATION COMPLETE			
351					
A	3400	3500 FACILITY AND EQUIPMENT CHECKOUT	BASE	43	3
A	3500	3500 FACILITY READY FOR USE			
361					
A	3500	11300 ----------		0	0

UNCLASSIFIED

A	2600	3600 CATEX (NAPPLICABILITY CONFIRMED			
	371				
A	3600	3700 ENV ASSESSMENT & FONSI DETERMINATION	[illegible]	40	5
A	3700	3700 ENVIRONMENTAL ASSESSMENT COMPLETE			
	381				
A	3700	3800 EA PRESENTATION TO BASE EPC	BASE	2	6
A	3800	3800 BASE EPC APPROVED EA			
	391				
A	3800	4100 BASE MAG & PA REVIEW FONSI	BASE	40	3
A	4100	4100 FONSI REVIEW COMPLETE			
	421				
A	4100	4200 FONSI PUBLISH & SOLICIT PUBLIC COMMENTS	BASE	30	2
A	4200	4200 COMPLETE PROGRAMMING DOCUMENTS	BASE	30	1
A	4200	4200 PUBLIC COMMENT PERIOD COMPLETE			
	431				
A	4300	4300 DI ISSUED TO MAJCOM/AFRCE			
	441				
A	4300	4310 MAJCOM/AFRCE NOTIFY DESIGN AGENT	AFRCE	15	1
A	4310	4310 DA NOTIFIED OF DI			
	451				
A	4310	4400 DA PREPARATION FOR PREDESIGN CONF	DAE	10	2
A	4400	4400 PREDESIGN CONFERENCE COMPLETE			
	461				
A	4400	4500 MAJCOM/AFRCE COLLECTS & REVIEWS COMMTS	AFRCE	20	2
A	4400	4500 CONCEPTUAL DESIGN	DAE	60	6
A	4500	4500 COMMENTS ON PREDESIGN COLLECTED			
	471				
A	4500	4600 RELAY COMMENTS TO DA	AFRCE	9	0
A	4600	4600 DA RECEIVED COMMENTS			
	481				
A	4600	4800 EARLY PRELIMINARY DESIGN	DAE	126	6
A	4800	4800 EARLY PRELIM DESIGN REVIEW COMPLETE			
	491				
A	4800	4900 MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	AFRCE	41	1
A	4800	4900 PRELIMINARY DESIGN	DAE	41	5
A	4900	4900 PRELIM DESIGN COMMENTS COLLECTED			
	975				
A	4900	5000 RELAY COMMENTS TO DA	AFRCE	9	1
A	4900	5100 PREP FOR EARLY PRELIM DESIGN CONF	AFRCE	21	1

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A	5000	5000 DA RECEIVED COMMENTS				
511						
A	5000	5000 EARLY PRELIM DESIGN CONTINUED	CO?		30	3
A	5100	5100 EARLY PRELIM DESIGN COMP COMPLETE				
521						
A	5100	5100 IST DESIGN MODIFICATION TO MAJCOM	TOI		2	0
A	5100	5400 EARLY PRELIM DESIGN COMP COMMENTS	COI		06	13
A	5200	5200 IST DESIGN REPORT SUBMITTED TO AFACE				
531	5127 1/74	1 9				
A	5200	5300 IST DESIGN NOTIFICATION TO HQ USAF	AFCCF	5127 1/74	2	0
A	5300	5300 IST DESIGN NOTIFICATION TO OSD	HQ USAF		6	0
A	5300	5300 IST DESIGN REPORT SUBMITTED TO HQ USAF				
541		0 9				
A	5400	5400 PRELIM DESIGN REVIEW COMPLETE				
551		2 9				
A	5400	5500 MAJCOM/AFACE COLLECT & REVIEW COMMENTS	AFCCF		41	1
A	5400	5600 FINAL DESIGN	COI		08	6
A	5500	5500 COMMENTS COLLECTED				
561		0 0				
A	5500	5600 RELAY COMMENTS TO DA	AFCCF		0	0
A	5500	5700 PREP FOR PRELIM DESIGN CONFERENCE	AFCCF		21	1
A	5600	5600 DA RECEIVED COMMENTS				
571		2 0				
A	5600	5700 PRELIM DESIGN CONTINUED	COI		30	3
A	5700	5700 PRELIM DESIGN COMP COMPLETE				
581		0 2				
A	5700	5800 PRELIM DESIGN COMP COMMENTS INCRP	COI		06	10
A	5800	5800 FINAL DESIGN REVIEW COMPLETE				
591		0 0				
A	5800	5900 MAJCOM/AFACE COLLECT & REVIEW COMMENTS	AFCCF		41	1
A	5800	6300 FINAL DESIGN DETAILS	COI		40	9
A	5900	2210 IST DESIGN NOTIFICATION TO HQ USAF	AFCCF		10	5
A	5900	5900 COMMENTS COLLECTED				
631		1 2				
A	5900	6000 PREP FOR FINAL DESIGN CONFERENCE	AFCCF		24	1
A	5900	6300 RELAY COMMENTS TO DA	AFCCF		9	0
A	6000	6000 FINAL DESIGN CONFERENCE COMPLETE				
641		1 0				

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A	6000	6400 FINAL DESIGN COMMENTS INCORPORATED		SILV 1/79	45	0	
A	6100	6100 FINAL DESIGN APPROVED					
621							
A	6100	6200 CONTRACT PREPARATION	AFSCF		32	3	
A	6200	2100 IFB PREPARATION	AFSCF		42	7	
A	6300	6300 MAJCOM/AFSC CONTRACT REVIEW COMPLT					
631							
A	6300	6000 FINAL DESIGN CONTINUES	SPO		21	1	
A	6300	6300 3A RECEIVES COMMENTS					
641							
A	6400	6100 FINAL DESIGN REVIEW BY MAJCOM/AFSC	AFSCF		34	7	
A	6400	6400 DESIGN COMPLETE					
691	SILV 1/79						
A	10000	10000 DUMMY NETWORK START EVENT					
1020							
A	10000	10160 DUMMY NETWORK START		A16/1*/80	0	-6	
A	10160	10160 SIR REDIRECTS TO COMPETITIVE PROTO START					
1092							
A	10160	10190 PREPARE REVISED DRAFT DCP			86	-0	
A	10160	10260 CONTINUE BASELINE PREPARATION & ANALYSIS			284	-0	
A	10190	10190 REVISED DRAFT DCP PREPARED					
1102							
A	10190	10200 PREPARE FOR DSARC REVIEW OF STRATEGY			0	-0	
A	10160	10210 FINAL DCP PREPARATION			120	-0	
A	10200	10200 DSARC REVIEW COMPLETE					
1112							
A	10200	10220 RATIFICATION OF MISSION BY DECISION AUTH			106	-0	
A	10210	10210 FINAL DCP 23A COMPLETED					
1122							
A	10210	10220 FINAL DCP APPROVAL			36	-0	
A	10220	10220 DCP 23A APPROVED BY DEPUTY SECDEF					
1132							
A	10220	10230 PMD FINALIZATION			0	-0	
A	10230	10230 PMD ISSUED					
1142							
A	10230	10240 PROGRAM CONTROL FORMALIZATION			16	-0	
A	10240	10240 A-S SPO FULLY ESTABLISHED					
1152							
A	10240	10250 FINALIZE APP			12	-0	

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A	10260	10260 GUN RFP PREPARATION	104	-0
A	10260	10270 BASELINE DATA PREP & PLANNING	1134	-0
A	10750	10250 RFP ISSUED TO INDUSTRY		
	1152			
A	10250	10280 INDUSTRY PREPARES REPLY TO RFP	134	-0
A	10260	10260 RESPONSE TO RFP RECEIVED		
	1172			
A	10250	10270 INDUSTRY REPLY EVALUATION	90	-0
A	10270	10270 SSAC RECOMMENDATIONS BRIEFINGS TO SSA		
	1182			
A	10270	10290 FINAL SOURCE SELECTION EVALUATION (P)	72	-0
A	10280	10280 RFP FOR GUN ISSUED TO INDUSTRY		
	1192			
A	10280	10330 INDUSTRY REPLY FORMULATION & EVALUATIONS	384	-0
A	10290	10290 DSARC I		
	1202			
A	10290	10300 DSARC I REVIEW & SELECTION	2	-0
A	10300	10300 CONTRACTORS SELECTED FOR CON PROTOTYPE		
	1212			
A	10300	10310 FINAL CONTRACT PREPARATION	8	-0
A	10290	10290 A-9 ENGINE CONTRACT DEVELOPMENT	504	-0
A	10310	10310 AUTHORIZATION TO AWARD CONTRACT		
	1222			
A	10310	10320 PROTOTYPE ENGINEERING	80	:
A	10310	10290 A-9 ENGINE CONTRACT NEGOTIATION	900	-0
A	10320	10320 PROTOTYPES DESIGNATED A-9 & A-10		
	1232			
A	10320	10350 PROTOTYPE FABRICATION & MANUFACTURE A-10	6852	-0*
A	10320	10360 PROTOTYPE FABRICATION & MANUFACTURE A-9	852	-0
A	10320	10310 GUN PROTOTYPING CONTRACTORS SELECTED		
	1242			
A	10330	10400 GUN PROTOTYPE FABRICATION & MANUFACTURE	842	-0
A	10140	10340 A-9 ENGINE CONTRACT NEGOTIATED		
	1252			
A	10340	10350 A-9 ENGINE FABRICATION & TEST	384	-0
A	10350	10390 A-10 FIRST FLIGHT		
	1262			
A	10350	10380 A-10 PROTOTYPE FLIGHT EVALUATION	312	-0

A	10360	10360 A-9 FIRST FLIGHT		
	1272			
A	10360	10360 A-9 PROTOTYPE FLIGHT EVALUATION		
A	10370	10370 PROPOSAL INSTRUCTIONS FOR FSD RELEASED	10.	-0
	1282			
A	10370	10480 BASIC CONTRACT DEVELOPMENT & PLANNING		
A	10380	10380 START AIR FORCE FLYOFF	20.	-0
	1292			
A	10380	10390 AIR FORCE COMPETITIVE FLYOFF		
A	10390	10380 FLYOFF COMPLETED	60	-0
	1312			
A	10390	10400 FLYOFF RESULTS EVALUATION		
A	10400	10400 DSARC II	90	-0
	1312			
A	10400	10410 REVIEW & RATIFICATION BY ESD		
A	10410	10410 A-10 SELECTED FOR FSD	2	-0
	1322			
A	10410	10420 FSD CONTRACT PREPARATION & NEGOTIATION		
A	10410	10430 ENGINES CONTRACT PREP & NEGOTIATION	64	-0
E	10420	100 FACILITY REQUIREMENTS REPORT GENERATIONS	64	-0
A	10420	10420 CONTRACT AWARD TO FSC FOR FSD	270	14
	1332			
A	10420	10450 PREPRODUCTION DEVICE MODIFICATIONS		
A	10420	10540 FUEL PLANNING DESIGN & MANUFACTURE	96	-0
A	10420	10440 WIND TUNNEL DRAG TESTS	104	-0
A	10420	10470 CONDUCT STATIC ARTICLE TESTS	110	-0
A	10420	10460 FATIGUE ARTICLE TEST PLANNING	1302	-0
A	10420	10720 EGRESS TEST DESIGN MODIFICATIONS	352	-0
A	10420	10790 MISC TEST PLANNING	66	-0
A	10420	10770 PREPARE VENDOR SPECS	84	-0
A	10420	10840 DETERMINE PRELIM DESIGN LOADS	12	-0
A	10420	10870 GUN LOCATION DETERMINATION	92	-0
A	10420	10380 PREPARE AVIONICS ORDERS	104	-0
A	10420	10810 INITIAL COST VERIFICATION	204	-0
			844	-0

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A      10420   10400 CONTRACT MONITORING & PLANNING                          402   -0
A      10420   10960 SPECIFICATION UPDATING                                   94   -0
A      10420   11010 PREPARE TRAINING PLANS                                   60   -0
A      10430   10430 ENGINE CONTRACT AWARD TO GE

  1342                 :     *
A      10430   11140 PRELIM MODIFICATION TO ENGINE DESIGN                     44   -0
A      10440   10440 GUN COMPETITIVE SHOOTOFF BEGINS

  1352                 .     *
A      10440   10480 GUN COMPETITIVE FLYOFF                                  130   -0
A      10450   10450 GUN COMPETITIVE SHOOTOFF ENDS

  1362                 (     *
A      10450   10480 GUN COMPETITIVE FLYOFF EVAL & SELECTIONS                 66   -0
A      10480   11080 GE SELECTED FOR GUN FSD

  1372                 *     *
A      10460   10470 FINAL CONTRACT PREP & NEGOTIATION                       55   -0
A      10470   10470 CONTRACT AWARD TO GE FOR GUN

  1382                 8     *
A      10470   11100 PRELIM MODIFICATION TO GUN DESIGN                       82   -0
A      10480   10480 DESIGN LAYOUTS COMPLETE

  1392                 9     *
A      10480   10480 FINALIZE MAJOR COMPONENT DESIGN                         46   -0
A      10490   10490 MAJOR FORGING RELEASE

  1402                 0     *
A      10490   10500 FINALIZE DESIGN                                         46   -0
-      10500   10510 MANUFACTURE AND DELIVER FORGINGS                       170   -0
A      10500    6000 --GUNFY--                                               0    0
A      10500   10500 DESIGN FREEZE

  1412                 1     *
A      10500   10520 PREPARE STRUCTURAL DRAWINGS                            204   -0
A      10510   10510 RECEIVE FORGINGS

  1422                 2     *
A      10510   10570 ASSEMBLE MAJOR COMPONENTS                               44   -0
A      10520   10520 RELEASE STRUCTURAL DRAWINGS

  1432                 3     *
A      10530   10530 PREPARE FINAL ASSEMBLY PLANS & JIGS                    222   -0
A      10530   10530 STRUCTURAL ASSEMBLY MANUFACTURE

  1442                 4     *
A      10530   10600 FINAL ASSEMBLY A/C #1                                   44   -0
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A	10540	10540 TOOL PLANNING, DESIGN & MANUFACTURE COMP		
	1452			
A	10540	10550 TOOL RELEASE & SET-UP	44	-0
A	10550	10550 RELEASE TOOLS		
	1462			
A	10550	10560 DEVELOP MANUFACTURING DETAILS	44	-0
A	10560	10560 MANUFACTURING DETAILS COMLETE		
	1472			
A	10560	10570 MANUFACTURE COMPONENTS	178	-0
A	10570	10530 ASSEMBLE SUBSTRUCTURE	304	-0
A	10570	10570 STRUCTURAL ASSEMBLY COMP		
	1482			
A	10580	10580 FINAL ASSEMBLY A/C 01 COMPLETE		
	1492			
A	10580	10590 GROUND TESTING	66	-0
A	10590	10590 GROUND TEST COMPLETE		
	1532			
A	10590	10600 PREPARATION FOR FIRST FLIGHT	20	-0
A	10600	10600 FIRST FLIGHT A/C 01 (PREPROD		
	1542			
A	10600	10610 PREPRODUCTION AIRCRAFT CONSTRUCTION	405	-0
A	10600	10620 INITIAL AIRCRAFT TESTING & DELIVERY	62	-0
A	10610	10610 DELIVER A/C 01 (PREPROD		
	1552			
A	10610	10630 DELIVERY & TEST OF LAST PREPROD A/C	672	-0
A	10610	11200 MANUFACTURE PRODUCTION A/C 0 1	25	-0
A	10620	10620 START OT&E TESTING		
	1572			
A	10620	10630 OT&E OF PREPRODUCTION AIRCRAFT	1005	-0
A	10630	10630 COMPLETE OT&E TESTING		
	1582			
A	10630	11200 --COMM--	0	-0
A	10640	10640 COMPLETE WIND TUNNEL TESTS		
	1592			
A	10640	10650 STORE SEPARATION TESTS	222	-0
A	10650	10650 STORE SEPARATION TEST COMPLETE		
	1602			
A	10650	10660 FLUTTER TESTS	240	-0
A	10660	10660 --COMM--	0	-0

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A	10660	10660 COMPLETE FLUTTER TESTS		
	1972			
A	10670	10670 --DUMMY--	0	+0
A	10670	10670 STATIC ARTICLE TESTS COMPLETE		
	1582			
A	10680	10680 FATIGUE ARTICLE TEST PLANNING COMP		
	1992			
A	10690	10690 FATIGUE ARTICLE FABRICATION & ASSEMBLY	642	+0
A	10690	10690 FINAL ASSEMBLY COMPLETE		
	1632			
A	10690	10700 FATIGUE TESTING	348	+0
A	10700	10700 1 LIFETIME FATIGUE TESTING COMP		
	1643			
A	10700	10710 FATIGUE TESTING CONTINUES	322	+0
A	10710	10710 2 LIFETIMES FATIGUE TESTING COMP		
	1652			
A	10710	10720 FATIGUE TESTING CONTINUES	352	+0
A	10720	10630 --DUMMY--	0	+0
A	10720	10720 4 LIFETIMES FATIGUE TESTING COMP		
	1682			
A	10725	10725 EGRESS TESTS DESIGN MODS COMP		
	1692			
A	10725	10730 EGRESS STRUCTURAL TESTS	352	+0
A	10730	10730 EGRESS STRUCTURAL TESTS COMP		
	1642			
A	10730	10740 EGRESS TRACK TESTS	216	+0
A	10740	10680 --DUMMY--	0	+0
A	10740	10740 EGRESS TRACK TESTS COMP		
	1662			
A	10750	10750 MISC TEST PLANNING COMP		
	1672			
A	10750	10760 CONDUCT MISC TESTS	1996	+0
A	10760	10638 --DUMMY--	0	+0
A	10760	10760 MISC TESTS COMPLETE		
	1682			
A	10770	10770 RELEASE VENDOR SPECS		
	1692			
A	10770	10780 --DUMMY--	0	+0
A	10770	10780 VENDOR REPLY & EVALUATION	44	+0
A	10780	10780 ISSUE RFQ		
	1702			

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A	10700	10800 PREPARE VENDOR CONTRACT	70	-0
A	10700	10700 SELECT VENDOR		
1712				
A	10700	10800 FINAL CONTRACT NEGOTIATIONS	1.	-0
A	10730	10830 PREPARE INSTALLATION DRAWINGS	9+6	-0
A	10840	10840 ISSUE PURCHASE ORDER		
1722				
A	10800	10820 MANUFACTURE & TEST COMPONENTS	582	-0
A	10810	10530 --DUMMY--	0	-0
A	10810	10810 RELEASE INSTALLATION DRAWINGS		
1732				
A	10810	10820 MANUFACTURE & TEST COMPONENTS	112	-0
A	10820	10830 --DUMMY--	0	-0
A	10820	10820 QUALIFICATION TESTS COMPLETE		
1742				
A	10830	10880 INSTALL COMPONENTS	9.	-0
A	10830	10830 RECEIVE COMPONENTS		
1752				
A	10840	10480 --DUMMY--	0	-0
A	10840	10840 PRELIM DESIGN LOADS & CRITERIA SET		
1762				
A	10840	10850 DETERMINE FINAL DESIGN LOADS	282	-0
A	10850	10520 --DUMMY--	0	-0
A	10850	10850 FINAL DESIGN LOADS & CRITERIA SET		
1772				
A	10850	10860 VIBRATION & ACOUSTIC ANALYSIS	340	-0
A	10860	10530 --DUMMY--	0	-0
A	10860	10860 VIBRATION & ACOUSTIC ANALYSIS COMPLETE		
1782				
A	10870	10870 GUN LOCATION FREEZE		
1792				
A	10870	10880 PREPARE GUN INSTALLATION DRAWING	43.	-0
A	10880	10890 GUN GROUNDCHECKS	222	-0
A	10880	10880 GUN INSTALLATION DRAWING COMPLETE		
1812				
A	10890	10890 AVIONICS LONG LEAD ORDERS RELEASED		
1812				
A	10890	10900 AVIONICS INTEGRATION & TESTING	482	-0

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A      10000   11000 NEGOTIATE ORDER                                          77   -0
A      10900   10600 --BURNT--                                                 0   -0
       10940   10900 AVIONICS INTEGRATION & TESTING COMPLETE

  1032                 )     :
A      10910   10910 DESIGN TO COST DEMO COMPLETE

  1032                 .     9
A      10910   11200 REVIEW PRELIM FSD DATA                                  142   -0
A      10910   11220 PREPARE LONG LEAD ORDER #1                              340   -0
A      10920   10920 PDR

  1042                 3     9
A      10920   10930 CONTRACT MONITORING & PLANNING                          15   -0
A      10930   10930 PDR

  1052                 4     9
A      10930   10940 CONTRACT MONITORING & PLANNING                          44   -0
A      10940   10940 CDR

  1062                 5     9
A      10940   10950 CONTRACT MONITORING & PLANNING                          242   -0
A      10950   10600 CONTRACT MONITORING & PLANNING                          44   -0
A      V 10    10950 SAFETY INSPECTION

  1072                 9     8
A      10960   10960 SPEC UPDATE

  1082                 .8    8
A      10960   10970 DETERMINE GUN INTERFERENCE DATA                         118   -0
A      10970   10970 PRELIM GUN INTERFERENCE DATA COMP

  1092                 8     9
A      10970   10980 ARMOR ANALYSIS                                          202   -0
A      10980   10980 ARMOR ANALYSIS COMPLETE

  1032                 9     9
A      10980   10990 VULNERABLE AREA ANALYSIS                                822   -0
A      10980   10990 VULNERABLE AREA ANALYSIS

  1012                 .     9
A      10990   11000 DETERMINE FINAL GUN INTERFERENCE DATA                   304   -0
A      11000   10630 --BURNT--                                                0   -0
A      11000   11000 FINAL GUN INTERFERENCE SPEC

  1022                 1     9
A      11010   11010 TRAINING PLANS COMPLETE

  1032                 1     8
A      11010   11030 PRELIM DESIGN OF FORMAL MAINT TRAIN SYST                13:   -0
A      11020   11020 FORMAL MTS DESIGN

  1042                 3     8

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A	11020	11030 FINAL MTS DESIGN			
A	11030	11030 MTS DESIGN FREEZE		22.	-0
	1?v2				
A	11030	11040 FINALIZE MTS DESIGN DETAILS			
A	11040	11040 MTS PDR		179	-0
	19v2				
A	11040	11050 MTS PLANNING & DESIGN REVIEW			
A	11050	11050 MTS CDR		11.	-0
	1972				
A	11050	11060 MTS CONSTRUCTION			
A	11060	11060 MTS PCA/FCA		962	-0
	1992				
A	11060	11070 MTS FINAL DETAILING & DELIVERY		46	-0
A	11070	10630 --DUMMY--		0	-0
A	11070	11070 DELIVERY OF MTS			
	1982				
A	11060	11080 SPARE ORDERED			
	2682				
A	11060	11090 MANUFACTURE & DELIVER AVIONICS		302	-0
A	11090	10580 INSTALL AVIONICS		192	-0
A	11080	11090 SPARE RECEIVED			
	2012				
A	11100	11100 GUN PDR			
	2032				
A	11100	11110 PREPRODUCTION GUN FABRICATION		195	-0
A	11110	11110 RECEIVE PHASE I GUN			
	2?32				
A	11110	11120 FINALIZE GUN DESIGN		410	-0
A	11120	11120 GUN CDR			
	2142				
A	11120	11130 TEST & QUALIFY GUN		216	-0
A	11130	10630 --DUMMY--		0	-0
A	11130	11130 GUN QUAL TESTS COMPLETE			
	2?92				
A	11130	12000 CONTINUING GUN PRODUCTION & DELIVERY		1296	-0
A	11140	11140 ENGINE HARDWARE DESIGN COMP			
	2162				
A	11140	11150 FINALIZE ENGINE DESIGN		112	-0
A	11150	11150 ENGINE CDR			
	2172				

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A	11150	11150 PRELIM ENGINE TESTING	300	-0
A	11160	11160 AEDC ENGINE EXPLORATORY TESTS COMP		
2.92				
A	11160	11170 ENGINE QUALIFICATION TESTING	144	-0
A	11170	11170 AEDC QUAL TESTS COMP		
2192				
A	11170	11180 PREPRODUCTION ENGINE FABRICATION	46	-0
A	11170	11190 ENGINE QUALIFICATION TESTING	124	-0
A	11180	11180 RECEIVE ENGINE #1		
2192				
A	11180	11190 PREPRODUCTION ENGINE TESTING	66	-0
A	11190	10630 --DUMMY--	6	-0
A	11190	11190 MDT APPROVAL		
2112				
A	11190	12900 CONTINUING ENGINE PRODUCTION & DELIVERY	1260	-0
A	11200	11200 DSARC III A		
2122				
A	11200	11210 RATIFICATION OF DSARC RECOMMENDATIONS	32	-0
A	11210	11210 AUTHORIZATION FOR INITIAL PRODUCTION		
2132				
A	11210	11220 AUTHORIZE LONG LEAD ORDER	120	-0
A	11215	11215 DSARC III B		
2142				
A	11215	11270 RATIFICATION OF DSARC RECOMMENDATIONS	32	-0
A	11270	11220 LONG LEAD ITEMS OPT 1 FUNDING POINT		
2152				
A	11220	11230 PREPARE LONG LEAD ORDER #2	376	-0
A	11220	11290 --DUMMY--	0	-0
A	11230	11230 LONG LEAD ITEMS OPT 2 FUNDING POINT		
2162				
A	11230	11240 PROGRAM COST VERIFICATION	30	-0
A	11240	11215 REVIEW OF FSD DATA	232	-0
A	11240	11240 DESIGN TO COST DEMO		
2172				
A	11240	11250 REVIEW OF TEST DATA	94	-0
A	11250	11250 FCA		
2182				
A	11250	11260 REVIEW OF FSD DATA	44	-0

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A	11280	11216 PREPARATION FOR DSARC REVIEW		
A	11280	11260 PDR	0.	-0
2112				
A	11270	11270 FOTSS PROGRAM START		
2212				
A	11270	11280 FOTSS		
A	11280	11260 FOTSS PROGRAM END (PHASE I)	320	-0
2212				
A	11280	11300 INITIAL OPERATIONAL CADRE TRAINING & QUAL		
A	11290	11270 IOT&E	320	-0
A	11290	11290 1ST PRODUCTION A/C DELIVERY	210	-0
2222				
A	11290	11310 EQUIP TEST & TRAINING UNITS		
A	11290	12080 CONTINUING AIRCRAFT PRODUCTION	770	-0
A	11300	11360 OPERATIONAL UNIT IOC	660	-0
2232				
A	11310	12080 --OUTPUT--		
A	11310	2980 SAFAF ACTION TO MEET IOC (PRECEDENCE)	0	-0
A	11310	11300 FINAL PREPARATION & COORDINATION	0	0
A	11310	11310 SAFAF ACTIVATED	235	-0
2242				
A	12080	12080 DUMMY NETWORK END		
2280				

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PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORG'N. AFIT/LS — CONTRACT NO. 611

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAD SLACK
4TH SORT KEY LATEST ALLOWED DATE (LAD)

TIME- JAN 1, YEAR ONE
REPORT DATE- 1/1/79
RELEASE DATE- 1/1/79

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	TIME EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
100	200	FACILITY REQUIREMENTS SENT TO BASE	.01	1.9	5/12/73	9/25/73	-27.8	194.6	CONT
200	300	FACILITY SURVEY	.01	4.6	1 /16/73	3/23/79	-27.8	2 .4	BASE
200	3600	INITIAL ENVIRONMENTAL EVALUATION	.99	4.6	1 /16/73	3/ 6/74	20.1	2 .3	BASE
300	400	ORIENTATION PROGRAM DETERMINATION	.01	4.6	11/16/73	5/ 1/79	-27.8	213.9	BASE
400	600	INITIAL DD FORM 1391 DEVELOPMENT	.01	3.3	12/11/73	3/23/79	-27.8	219.2	BASE
600	700	INITIAL DD FORM 1391 DEVELOPMENT	.01	1.9	12/18/73	5/31/79	-27.8	213.1	BASE
700	800	1391 PROJECT S REVIEW BY MAJCOM	.01	6.6	2/ 5/74	7/16/79	R 6/15/73 -27.8	219.7	MAJCOM
700	1000	ACCELERATED PROJECT BOOK DEVELOPMENT	.61	17.4	4/22/74	11/ 3/79	-20.5	23 .6	BASE
800	900	PROGRAM APPROVAL & FORWARD TO HQ USAF	.01	10.8	4/22/74	11/ 3/79	R11/15/73 -27.8	23 .6	MAJCOM
800	1100	MAJCOM REVIEW OF 1391	.01	4.4	3/ 7/74	11/ 3/79	R11/30/73 -13.3	22 .1	MAJCOM
900	1200	PROGRAM REVIEW BY HQ USAF	.01	13.6	7/26/74	1/ 1/79	-27.8	244.7	HQ USAF
1000	1100	ACCELERATED PB MAILED TO MAJCOM	.61	1.9	7/26/74	11/30/79	R11/30/73 -20.6	231.4	BASE
1000	1400	DEMELSTR PB PREPARATION	.01	26.3	1 /25/74	6/24/74	-17.4	215.0	BASE
1100	1500	MAJCOM REVIEW OF ABBREVIATED PB	.03	13.1	7/31/74	7/ 1/74	R 7/ 1/74 -4.2	244.2	MAJCOM
1200	1300	APPROVED PROGRAM SELECTION BY HQ USAF	.01	3.2	8/19/74	2/ 1/74	R 2/ 1/74 -27.8	247.2	HQ USAF
1300	1600	PLN ESTBSL SUBMIT BY HQ USAF	.01	22.6	1/27/75	8/ 1/74	-24.4	203.2	HQ USAF
1300	4300	DI ISSUE TO MAJCOM/AFRCE	.01	1.2	8/26/74	6/ 9/74	-10.7	247.4	HQ USAF
1400	1500	DEMELSTR PB MAILED TO MAJCOM	.01	1.9	11/ 1/74	7/ 1/74	R 7/ 1/74 -17.4	237.7	BASE
1500	1600	COMPLETE PB REVIEW & MAIL TO HQ USAF	.01	4.5	12/ 5/74	8/ 1/74	R 8/ 1/74 -17.4	262.2	MAJCOM
1600	1700	HQ USAF REVIEW OF PROGRAM	.01	8.3	3/26/75	11/ 1/74	R11/ 1/74 -24.4	277.6	HQ USAF
1700	1800	OSD & BOB REVIEW OF PROGRAM	.01	13.6	9/ 1/75	12/ 1/79	-24.4	241.1	OSD
1800	1900	PROGRAM SENT TO CONGRESS	.01	3.9	1/ 8/75	1/ 1/79	R 1/15/75 -24.4	692.7	CONGRESS
1900	2000	CONGRESSIONAL REVIEW & APPROVAL	.56	36.1	3/24/76	3/ 1/79	0.0	323.1	CONGRESS
2000	2100	BILLS SIGNED BY PRESIDENT	.01	1.6	5/29/76	3/ 1/79	11/ 1/75 0.0	326.7	PRESIDEN
2100	2200	OMB APPORTIONS FUNDS	.56	3.4	6/21/76	6/21/79	0.0	332.1	OMB
2200	2210	HQ USAF APPORTIONS FUNDS TO AFROE	.20	3.4	7/14/76	9/14/79	0.0	335.4	HQ USAF
2210	6200	FINANCIAL PLANNING	.56	5.1	8/16/76	5/15/76	0.0	340.6	AFCE
2300	2400	CWE PREPARATION	.56	1.6	7/29/76	8/ 1/79	0.5	340.4	AF CE
2300	2600	SITE APPRAISEMENT,FORMULATION & RELEIPTS	.80	5.3	9/ 1/76	9/ 1/79	0.0	351.1	AFCE
2400	2500	PREPARATION FOR AWARD	.56	4.2	8/27/76	9/ 1/79	0.5	351.6	AF CE
2500	2600	BIDS OPENED, REVIEWED & APPROVED	.56	1.6	9/ 9/76	9/ 9/79	0.0	352.1	AFCE
2600	2800	PRECONSTRUCTION CONF PREPARATION	.56	1.6	9/21/76	9/21/79	0.0	353.7	AFCE
2800	2900	FACILITY CONSTRUCTION	.56	133.3	4/29/77	9/31/79	0.0	457.1	AFCE
2900	3000	PRELIMINL INSPECTION	.56	1.6	11/ 6/78	11/ 6/79	0.0	458..	AFCE
3000	3100	CORRECT INSPECTION DEFICIENCIES	.56	6.6	11/24/76	11/24/79	0.0	46 .6	AFCE
3100	3200	FINAL INSPECTION	.56	1.2	11/27/78	11/27/79	0.0	464.8	AFCE
3200	3300	FACILITY TRANSFER	.56	1.9	12/ 4/78	12/ 4/79	0.0	466.7	AFCE
3300	3400	EQUIPMENT INSTALLATION	.50	6.6	1/22/79	1/22/79	0.0	472.3	BASE
3400	3500	FACILITY AND EQUIPMENT CHECKOUT	.50	4.3	2/21/79	2/21/79	0.0	476.6	BASE
3500	11300	--DUMMY--	.50	0.0	2/20/79	2/21/79	0.0	476.6	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION [illegible] REPORTING ORGN. AFIT/LS CONTRACT NO. 001 TIME- JAN 1, YEAR CAL
1ST SORT KEY [illegible] REPORT DATE- 1/1 /69
2ND SORT KEY [illegible] RELEASE DATE-1/1 /69
3RD SORT KEY [illegible]
4TH SORT KEY [illegible]

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
3600	3700	[illegible] ASSESSMENT & FONSI DETERMINATION	.99	4.0	11/19/73	4/11/74		20.1	[illegible]	BASE
3700	3800	[illegible] PREPARATION TO BASE EPC	.99	0.2	11/23/73	4/12/74		20.1	[illegible]	BASE
3800	4100	BASE EVG & PC REVIEW FONSI	.99	4.0	12/19/73	5/1/74		20.1	[illegible]	BASE
4100	4200	FONSI PUBLISH & SOLICIT PUBLIC COMMENTS	.99	5.0	1/25/74	6/1/74		20.1	[illegible]	BASE
4200	1400	COMPLETE PROGRAMMING DOCUMENTS	.99	1.0	6/ 1/74	6/2/74		20.1	[illegible]	BASE
4300	4310	MAJCOM/AFRCE NOTIFY DESIGN AGENT	.01	1.0	5/28/74	6/12/74		-10.7	[illegible]	AFRCE
4310	4400	DA PREPARATION FOR PREDESIGN CONF	.01	1.0	[illegible]	6/2/74		-10.7	[illegible]	COE
4400	4500	MAJCOM/AFRCE COLLECTS & REVIEWS COMMTS	.01	4.0	1 / 6/74	8/ 1/74		-9.4	[illegible]	AFRCE
4400	4600	PRELIMINARY DESIGN	.01	8.0	11/23/74	9/ 9/74		-10.7	[illegible]	COE
4500	4600	REPLY COMMENTS TO DA	.01	5.0	1 /15/74	8/ 8/74		-9.4	[illegible]	AFRCE
4600	4800	REPLY PRELIMINARY DESIGN	.01	12.0	1/21/75	11/ 1/74		-10.7	[illegible]	COE
4800	4900	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.01	4.0	2/19/75	12/ 3/74		-10.7	[illegible]	AFRCE
4800	5000	PRELIMINARY DESIGN	.01	4.0	2/19/75	12/13/74		-9.0	[illegible]	COE
4800	5000	REPLY COMMENTS TO DA	.01	5.0	2/25/75	12/13/74		-10.7	[illegible]	AFRCE
4900	5100	PREP FOR REPLY PRELIM DESIGN CONF	.01	2.0	3/ 5/75	1/ 2/75		-8.3	[illegible]	AFRCE
5000	5100	REPLY PRELIM DESIGN CONTINUES	.01	3.0	3/18/75	1/ 2/75		-10.7	[illegible]	COE
5100	5200	3 X DESIGN NOTIFICATION TO MAJCOM	.01	0.2	3/19/75	1/ 3/75		-10.7	[illegible]	COE
5100	5400	REPLY PRELIM DESIGN CONF COMMENTS	.99	8.0	[illegible]	9/16/75		16.8	[illegible]	COE
5200	5300	3 X DESIGN NOTIFICATION TO HQ USAF	.01	0.2	3/20/75	1/ 6/75	11/29/74	-10.7	[illegible]	AFRCE
5100	1800	3 X DESIGN NOTIFICATION TO OSD	.01	0.0	3/25/75	1/ 3/75		-10.7	[illegible]	HQ USAF
5400	5500	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.0	[illegible]	11/ 3/75		10.0	[illegible]	AFRCE
5400	5600	FINAL DESIGN	.99	8.0	7/15/75	11/12/75		16.8	243.8	COE
5500	5600	REPLY COMMENTS TO DA	.99	6.0	6/23/75	11/12/75		19.8	240.0	AFRCE
5500	5700	PREP FOR PRELIM DESIGN CONFERENCE	.99	2.0	7/ 1/75	12/ 1/75		21.6	291.2	AFRCE
5600	5700	PRELIM DESIGN CONTINUES	.99	3.0	6/ 5/75	12/ 1/75		16.8	[illegible]	COE
5700	9800	PRELIM DESIGN CONF COMMENTS INCORP	.99	9.0	1 /13/75	2/12/76		16.8	305.6	COE
5800	5900	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.0	11/12/75	3/12/76		16.8	309.7	AFRCE
5800	6300	FINAL DESIGN DETAILS	.99	4.0	11/14/75	3/14/76		17.3	310.1	COE
5900	2210	HQ DESIGN NOTIFICATION TO HQ USAF	.99	1.0	11/19/75	5/1/76		24.0	310.7	AFRCE
5900	6000	PREP FOR FINAL DESIGN CONFERENCE	.99	2.0	11/26/75	4/ 2/76		17.7	311.8	AFRCE
5900	6300	REPLY COMMENTS TO DA	.99	0.0	11/18/75	3/18/76		16.8	310.0	AFRCE
6000	6400	FINAL DESIGN COMMENTS INCORPORATED	.01	4.0	1/ 7/76	5/ 4/76	11/ 1/75	16.8	317.2	COE
6100	6200	CONF-ADP PREPARATION	.99	3.2	2/23/76	6/13/75		16.8	323.0	AFRCE
6200	2300	IPF PREPARATION	.94	4.2	7/19/76	[illegible]		0.0	344.0	AFRCE
6300	6000	FINAL DESIGN CONTINUES	.99	2.0	12/ 4/75	4/ 2/76		16.8	312.7	COE
6400	6100	FINAL DESIGN REVIEW BY MAJCOM/AFRCE	.99	3.4	1/30/76	5/27/76		16.8	320.6	AFRCE
CALCULATED TL IS BEFORE START OF 1 YR CALANDAR										
10000	10180	LUMPY ACTIVITY START		0.0			A16/10/69	-27.8	0.0	
CALCULATED TL IS BEFORE START OF 1 YR CALANDAR										
I 10180	10190	PREPARE REVISED DRAFT DCP		0.0	12/12/69			-27.8	0.0	
I 10180	10260	COMBINE BASELINE PREPARATION & ANALYSIS		28.4	4/26/70	10/ 8/69		-28.8	28.4	
CALCULATED TL IS BEFORE START OF 1 YR CALANDAR										
10190	10200	PREPARE FOR OSARC REVIEW OF STRATEGY		0.0	12/18/69			-27.3	9.4	

UNCLASSIFIED

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK REPORTING ORGN. AFIT/LS CONTRACT NO. 001
1ST SORT KEY PROCESSING NO.
2ND SORT KEY SUCC EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY TYPE FILE OUT (*)

TIME= JAN 1, YEAR ZERO
REPORT DATE= 10/1/79
RELEASE DATE=10/1/79

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	U.G.
CALCULATED TL IS 0 PERT START OF 1 YR CALANDAR										
10190	10210	FINAL JOB APPROPRIATION		13.0	3/17/78			-27.4	21.6	
CALCULATED TL IS 0 PERT START OF 1 YR CALANDAR										
10200	10220	SATISFACTION OF NEEDS BY DECISION AUTH		15.6	4/ 9/78			-27.8	23.4	
CALCULATED TL IS 0 PERT START OF 1 YR CALANDAR										
10210	10220	FINAL JOB APPROVAL		3.0	4/ 7/78			-27.4	24.6	
CALCULATED TL IS 0 PERT START OF 1 YR CALANDAR										
10220	10230	SOL EVALUATION		6.8	4/15/78			-27.8	25.8	
10230	10240	PROGRAM DOCU CL FORMALIZATION		1.6	4/27/78	10/ 1/69		-27.8	27.4	
10240	10250	FINALIZE RFP		1.8	5/ 8/78	11/21/69		-27.8	29.2	
10240	10280	GUN RFP PREPARATION		16.6	4/21/78	6/ 4/72		82.6	46.1	
10240	10370	PASELINE DATA PREP & PLANNING		113.4	4/14/72	4/21/ 2		-24.6	140.0	
10250	10260	INDUSTRY PROPOSALS REPLY TO RFP		13.8	5/12/78	1/23/79		-27.8	52.8	
10260	10270	INDUSTRY REPLY EVALUATION		9.8	1 /22/79	6/ 8/79		-27.8	52.6	
10270	10280	FINAL SOURCE SELECTION EVALUATION (P)		7.2	12/15/78	5/23/79		-27.8	54.8	
10240	10330	INDUSTRY STUDY FORMULATION & EVALUATION		35.8	4/25/71	12/12/72		82.6	77.4	
10290	10300	[illegible] & SELECTION		1.2	12/19/78	6/29/79		-27.8	83.8	
10300	10310	FINAL CONTRACT PREPARATION		1.8	12/22/78	6/ 4/79		-27.8	84.6	
10300	10340	ENGINE CONTRACT DEVELOPMENT		54.8	1/31/72	7/ 2/73		-26.4	111.4	
10310	10320	PROTOTYPE ENGINEERING		9.2	2/26/71	8/12/77		-27.2	2 .0	
10310	10340	A-9 ENGINE CONTRACT NEGOTIATIONS		55.0	1/19/72	7/ 2/73		-27.0	110.8	
10320	10350	PROTOTYPE FABRICATION & MANUFACTURE A-10		52.4	1/19/72	11/ 3/73		-27.2	132.4	
10320	10360	PROTOTYPE FABRICATION & MANUFACTURE A-9		65.2	1/ 5/72	11/23/73		-26.8	133.2	
10330	10440	GUN PROTOTYPE FABRICATION & MANUFACTURE		84.2	12/22/72	1/ 3/74		82.6	164.2	
10340	10350	A-9 ENGINE FABRICATION & TEST		28.4	1/12/72	11/23/73		-27.8	133.2	
10350	10390	A-10 PROTOTYPE FLIGHT EVALUATION		21.2	1 /31/72	4/ 3/73		-27.2	133.6	
10360	10380	A-9 PROTOTYPE FLIGHT EVALUATION		18.0	1/19/72	4/ 3/73		-27.8	134.2	
10370	10420	BASIC DATA AND DEVELOPMENT & PLANNING		29.6	2/ 9/73	8/15/72		-26.6	106.8	
10380	10390	AIR FORCE COMPETITIVE FLYOFF		8.8	12/ 7/72	5/13/73		-27.6	106.0	
10390	10400	FLYOFF RESULTS EVALUATION		5.6	1/19/73	6/ 1/73		-27.8	106.4	
10400	10410	REVIEW & RATIFICATION BY SSA		1.2	1/22/73	7/ 3/73		-27.8	107.0	
10410	10420	FSL CONTRACT PREPARATION & NEGOTIATION		8.0	2/ 5/73	8/15/73		-27.8	173.6	
10410	10430	ENGINEER CONTRACT PREP & NEGOTIATION		8.6	2/ 5/73	2/13/75		98.8	173.6	
10420	100	FACILITY REQUIREMENTS REPORT GENERATION	.01	25.9	5/ 6/73	2/ 7/77		-27.8	194.9	
10420	10480	PERFORMANCE DESIGN MODIFICATIONS		9.8	1/31/73	11/19/75		72.4	117.6	
10420	10560	TOOL PLANNING DESIGN & MANUFACTURE		18.4	2/13/73	11/13/75		66.4	131.4	
10420	10640	WIND TUNNEL DEBG TESTS		11.8	1/21/73	2/22/77		101.8	194.6	
10420	10670	CONDUCT STATIC ARTICLE TESTS		119.2	7/ 1/75	7/ 3/78		103.4	291.2	
10420	10690	FATIGUE ARTICLE TEST PLANNING		26.2	9/ 7/73	9/ 4/75		101.0	199.2	
10420	10725	FREEZE TEST DESIGN MODIFICATIONS		8.8	4/16/73	5/ 3/77		105.0	179.4	
10420	10750	MISC TEST PLANNING		2.6	2/19/73	5/21/75		110.6	173.4	
10420	10770	PREPARE VENDOR SPECS		1.2	2/13/73	8/15/74		72.8	174.2	
10420	10840	DETERMINE PRELIM DESIGN LOADS		9.2	5/ 8/73	11/14/74		72.8	182.2	
10420	10870	GUN LOCATION DETERMINATION		16.6	7/13/73	12/ 2/74		73.0	191.4	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK
1ST SORT KEY PRED EVENT NO.
2ND SORT KEY SUCC EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (ES)

REPORTING ORGN. AFIT/LS
CONTRACT NO. F 1

TERM- JAN 1, YEAR CAL
REPORT DATE- 1/1 /09
RELEASE DATE-1/31/79

PRED EVENT	SUCC EVENT	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	O-G.
10420	10490	PREPARE WORKING ORDERS		21.4	7/27/73	1/ 4/79		73.2	193.4	
10420	10910	INITIAL COST VERIFICATION		54.2	3/27/74	12/10/79		87.4	227.2	
10420	10820	CONTRACT MONITORING & PLANNING		61.2	12/10/73	9/22/78		72.3	217.2	
10420	10960	SPECIFICATION UPDATING		9.4	1/ 7/73	4/12/78		148.8	132.4	
10420	11010	PREPARE TESTING PLANS		4.6	4/ 5/73	3/13/79		149.2	177.6	
10430	11140	PRELIM MODIFICATION TO ENGINE DESIGN		4.6	1/ 5/73	3/13/79		98.3	177.6	
10440	10450	GUN COMPETITIVE FLYOFF		13.8	4/ 2/73	11/13/78		92.6	176.4	
10450	10460	GUN COMPETITIVE FLYOFF EVAL & SELECTION		9.8	1/ 4/77	1/31/79		92.6	133.8	
10460	10470	FINAL CONTRACT PREP & NEGOTIATION		1.8	6/21/73	1/31/79		92.6	159.6	
10470	11100	PRELIM MODIFICATION TO GUN DESIGN		8.2	7/ 8/73	3/29/79		92.6	159.4	
10480	10490	FINALIZE MAJOR COMPONENT DESIGN		4.6	6/13/73	11/13/78		72.4	137.2	
10490	10500	FINALIZE DESIGN		4.6	7/17/73	12/10/79		72.4	191.6	
10490	10510	MANUFACTURE AND DELIVER FORGINGS		17.6	1/16/73	4/23/79		77.6	2 4.6	
10500	6000	--EVENT--		4.4	7/17/73	4/ 2/79		137.7	191.6	
10500	10620	PREPARE STRUCTURAL DRAWINGS		38.4	2/21/74	7/23/79		72.4	222.2	
10510	10870	ASSEMBLE MAJOR COMPONENTS		4.4	11/13/73	5/27/79		77.6	2 4.6	
10520	10530	PREPARE FINAL ASSEMBLY PLANS & JIGS		22.2	7/31/74	1/ 5/79		72.4	244.4	
10530	10580	FINAL ASSEMBLY A/C #1		4.4	9/27/74	2/ 4/79		68.4	252.8	
10540	10550	TOOL RELEASE & SET-UP		4.4	8/14/73	12/13/78		68.4	199.6	
10550	10560	DEVELOP MANUFACTURING DETAILS		4.4	9/14/73	1/22/79		68.4	2 4.6	
10560	10670	MANUFACTURE COMPONENTS		17.8	1/23/74	5/27/79		68.4	233.2	
10870	10580	ASSEMBLE SUBSTRUCTURE		36.4	8/27/74	1/ 5/79		68.4	248.4	
10580	10590	GROUND TESTING		8.8	12/ 2/74	4/ 6/79		68.4	241.6	
10590	10600	PREPARATION FOR FIRST FLIGHT		2.4	12/16/74	4/23/79		68.4	263.6	
10600	10610	PREPRODUCTION AIRCRAFT CONSTRUCTION		42.6	1/15/75	2/17/77		68.4	3 6.2	
10600	10620	INITIAL AIRCRAFT TESTING & DELIVERY		8.2	7/13/75	6/23/78		70.2	471.6	
10610	10630	DELIVERY & TEST OF LAST PREPROD A/C		57.2	2/ 9/77	7/ 3/78		71.2	373.4	
10610	11290	MANUFACTURE PRODUCTION A/C # 1		1.6	1/28/75	3/ 1/77		68.4	3 5.2	
10620	10630	DTEF OF PREPRODUCTION AIRCRAFT		172.6	2/15/77	7/ 3/78		70.2	37 .4	
10630	11280	--EVENT--		1.4	2/16/77	7/ 3/78		70.2	37 .4	
10840	10650	STORE SEPARATION TESTS		22.2	1/29/73	11/23/78		101.8	4 6.2	
10650	10660	FLUTTER TESTS		24.4	1/16/74	4/23/79		101.8	23 .2	
10660	10680	--EVENT--		1.4	1/16/74	4/23/79		101.8	23 .2	
10670	10610	--EVENT--		1.0	7/ 1/75	7/ 3/78		163.4	291.2	
10680	10690	FATIGUE ARTICLE FABRICATION & ASSEMBLY		61.2	11/21/74	11/16/78		101.8	25 .4	
10690	10700	FATIGUE TESTING		34.8	7/30/75	7/21/77		101.8	295.2	
10700	10710	FATIGUE TESTING CONTINUES		22.2	1/ 8/76	12/23/77		101.8	317.4	
10710	10720	FATIGUE TESTING CONTINUES		26.2	7/ 9/76	7/ 3/78		101.8	343.6	
10720	10630	--EVENT--		1.8	7/ 9/76	7/ 3/78		101.8	367.6	
10720	10730	CRITICAL STRUCTURAL TESTS		26.2	1/22/73	11/14/78		101.8	2 3.2	

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS
CONTRACT NO. N/A

INTEGRATED ACQUISITION NETWORK
1ST SORT KEY AREA OUTSIDE EVENT NO.
2ND SORT KEY USR USER EVENT NO.
3RD SORT KEY LEVEL SLACK
4TH SORT KEY EXPECTED DATE (ES)

TIME= JAN 1[illegible] YEAR CAL
REPORT DATE= 1[illegible]
RELEASE DATE=1[illegible]

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	REMAINING SLACK	REMAINING TIME	ORG.
10730	10740	[illegible] TRACK TESTS		21.0	3/27/74	4/[illegible]		106.0	[illegible]	
10740	10660	--DUMMY--		1.0	7/31/74	4/[illegible]		105.0	22[illegible]	
10750	10760	CONDUCT HITS TESTS		159.0	2/ 4/76	7/ 7/78		110.6	3[illegible]	
10760	10630	--DUMMY--		1.0	2/ 5/76	7/ 3/78		110.6	3[illegible]	
10770	10780	--DUMMY--		1.0	3/13/73	6/15/74		72.8	17[illegible]	
10770	10780	VENDOR REPLY & EVALUATION		5.0	4/24/73	9/[illegible]/74		72.8	18[illegible]	
10780	10800	PREFERT VENDOR CONTRACT		7.0	11/ 1/73	11/ 7/74		72.8	181.2	
10790	10800	FINAL CONTRACT NEGOTIATIONS		1.0	5/ 1/73	11/ 7/74		72.8	181.2	
10790	10810	PREPARE INSTALLATION DRAWINGS		59.6	7/21/74	1/ 3/76		82.0	234.8	
10800	10830	MANUFACTURE & TEST COMPONENTS		58.2	6/24/74	12/ 1/75		72.8	233.4	
10810	10830	--DUMMY--		0.0	7/21/74	1/ 3/76		82.0	234.8	
10810	10820	MANUFACTURE & TEST COMPONENTS		11.2	2/ 9/74	7/ 3/78		148.6	2[illegible]	
10820	10630	--DUMMY--		0.0	8/ 6/74	7/ 3/78		148.6	[illegible]	
10830	10580	INSTALL COMPONENTS		9.0	6/27/74	2/ 4/76		72.8	2[illegible]	
10840	10860	--DUMMY--		0.0	5/ 8/73	11/14/74		72.8	162.2	
10840	10850	SET UP OF FINAL DESIGN LOADS		35.2	1/11/74	7/[illegible]/75		77.2	217.4	
10850	10520	--DUMMY--		0.0	1/16/74	7/[illegible]/75		77.2	217.4	
10860	10860	VIBRATION & ACOUSTIC ANALYSIS		34.8	5/24/74	7/ 3/78		182.6	292.2	
10860	10630	--DUMMY--		0.0	9/24/74	7/ 3/78		182.6	292.2	
10870	10880	PREPARE GUN INSTALLATION DRAWING		43.6	7/21/74	11/25/75		73.0	234.8	
10880	10590	GUN COMPONENTS		22.2	1 /26/74	4/ 5/76		73.0	287.6	
10890	10900	AVIONICS INTEGRATION & TESTING		55.2	11/ 7/74	4/[illegible]/76		73.4	259.6	
10890	11080	ACQUIRE RADAR		2.2	8/13/73	1/23/75		73.2	197.0	
10900	10660	--DUMMY--		0.0	11/ 7/74	4/[illegible]/76		73.4	259.6	
10910	11200	LEVEL M RADAR ESD DATA		14.2	7/ 8/74	3/25/76		67.4	241.2	
10910	11280	PREPARE LONG LEAD ORDER #1		34.8	11/ 1/74	7/21/76		67.4	292.4	
10920	10930	CONTRACT MONITORING & PLANNING		13.6	7/21/74	8/[illegible]/75		72.6	226.2	
10930	10940	CONTRACT MONITORING & PLANNING		4.6	4/23/74	9/25/75		72.6	231.8	
10940	10960	CONTRACT MONITORING & PLANNING		24.2	1 /14/74	3/13/76		72.6	295.0	
10950	10600	CONTRACT MONITORING & PLANNING		4.4	11/14/74	4/[illegible]/76		72.6	295.4	
10960	10970	DETERMINE GUN INTERFERENCE DATA		11.0	/21/73	6/23/75		148.8	193.	
10970	10980	[illegible] ANALYSIS		21.2	12/18/73	11/19/75		148.8	213.2	
10980	10990	VULNERABLE AREA ANALYSIS		52.2	12/30/74	11/[illegible]/77		148.8	2[illegible]	
10990	11000	DETERMINE FINAL GUN INTERFERENCE DATA		34.4	2/ 1/75	7/ 3/ 6		148.8	295.8	
11000	10630	--DUMMY--		0.0	8/ 6/75	7/ 3/78		148.8	295.8	
11010	11020	PRELIM DESIGN OF FORMAL MAINT TRAIN SYS		13.0	7/ 9/73	6/14/76		149.2	19[illegible]	
11020	11030	FINAL MTS DESIGN		22.0	12/13/73	11/18/76		149.2	212.6	
11030	11040	FINALIZE MTS DESIGN DETAILS		17.0	4/15/74	3/18/77		149.2	223.6	
11040	11050	MTS PLANNING & DESIGN REVIEW		11.0	7/ 2/74	6/ 6/77		149.2	24[illegible]	
11050	11060	MTS CONSTRUCTION		56.2	6/27/75	9/31/78		149.2	29[illegible]	

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS
CONTRACT NO. F41

TERM- JAN 1[illegible] YEAR CAL
REPORT DATE- 1[illegible]
RELEASE DATE-10/1[illegible]

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
11060	11070	MTS FINAL [illegible] & DELIVERY		6.6	/31/75	7/ 3/78		145.2	29[illegible]	
11070	10630	--[illegible]--		0.0	7/31/75	7/ 3/78		149.2	29[illegible]	
11080	11090	[illegible] & DELIVER AVIONICS		38.2	5/21/74	11/29/77		73.2	23[illegible]	
11090	10580	[illegible] AVIONICS		13.2	6/23/74	2/ [illegible]		73.2	24[illegible]	
11100	11110	[illegible] FOR FABRICATION		15.6	11/29/73	7/15/78		62.6	43[illegible]	
11110	11120	FIRE[illegible] GUN DESIGN		61.8	9/25/74	5/11/78		62.6	27[illegible]	
11120	11130	TEST & DELIVERY GUN		21.6	2/28/75	11/11/77		62.6	27[illegible]	
11130	10630	--[illegible]--		0.0	2/28/75	7/ 3/78		178.8	27[illegible]	
11180	12000	CONTINUING GUN PRODUCTION & DELIVERY		120.0	7/ 6/77	2/21/79		62.8	39[illegible]	
11140	11150	FIRE[illegible] ENGINE DESIGN		11.2	6/26/73	6/ 2/78		86.2	17[illegible]	
11150	11160	[illegible] ENGINE TESTING		39.8	4/ 2/74	3/12/77		98.4	22[illegible]	
11160	11170	ENGINE QUALIFICATION TESTING		16.6	7/31/74	7/ 7/78		98.8	24[illegible]	
11170	11180	[illegible] ENGINE FABRICATION		4.6	7/31/74	8/ 9/78		98.8	24[illegible]	
11170	11190	ENGINE QUALIFICATION TESTING		12.8	1/23/74	11/11/77		100.2	23[illegible]	
11180	11190	[illegible] ENGINE TESTING		8.8	11/ 1/74	11/11/77		98.4	25[illegible]	
11190	10630	--[illegible]--		0.0	11/ 1/74	7/ 3/78		178.8	25[illegible]	
11180	12000	CONTINUING ENGINE PRODUCTION & DELIVERY		120.0	3/11/77	2/21/79		94.8	37[illegible]	
11200	11210	[illegible] OF OSARC RECOMMENDATIONS		3.2	7/31/74	6/19/77		87.4	24[illegible]	
11210	11220	[illegible] LONG LEAD ORDER		13.4	11/ 1/74	7/21/77		87.4	25[illegible]	
11215	11270	[illegible] OF OSARC RECOMMENDATIONS		2.8	2/28/76	11/11/77		87.4	32[illegible]	
11220	11230	PREPARE LONG LEAD ORDER #2		37.6	7/31/75	6/15/77		87.4	29[illegible]	
11220	11200	--[illegible]--		0.0	11/ 1/74	3/ 1/77		114.4	25[illegible]	
11230	11240	[illegible] COST VERIFICATION		3.8	8/27/75	8/12/77		87.4	29[illegible]	
11240	11215	REVIEW OF FSD DATA		23.2	6/12/76	10/27/77		87.4	32[illegible]	
11240	11250	REVIEW OF TEST DATA		9.0	1/31/75	7/29/77		89.2	3[illegible]	
11250	11260	REVIEW OF FSD DATA		4.4	12/ 3/75	8/ 9/77		89.2	31[illegible]	
11260	11215	PREPARATION FOR OSARC REVIEW		8.8	3/31/76	10/27/77		89.2	32[illegible]	
11270	11280	FOTSE		32.8	11/23/76	7/ 3/78		62.2	36[illegible]	
11280	11300	INITIAL OPERATIONAL CADRE TRAINING & IOA		52.0	1/ 3/77	2/21/79		70.2	41[illegible]	
11290	11270	IOTSE		21.8	6/ 2/76	11/11/77		62.2	32[illegible]	
11290	11310	EQUIP TEST & TRAINING UNITS		77.0	7/29/77	9/ 1/78		18.4	34[illegible]	
11290	12000	CONTINUING AIRCRAFT PRODUCTION		86.0	7/ 5/77	2/21/79		62.8	39[illegible]	
11300	12000	--[illegible]--	.50	0.0	2/26/79	2/21/79		0.0	47[illegible]	
11310	2800	SAFF ACTION TO MEET IOC (PRECEDENCE)		0.0	[illegible]	[illegible]		72.2	36[illegible]	
11310	11300	FINAL PREPARATION & COORDINATION		23.4	1/17/77	2/21/79		68.4	4[illegible]	

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PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 001 — TERM JAN 1ST YEAR CAL — REPORT DATE- 1/10/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,10/10/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
100	FACILITY REQUIREMENTS PLANNED BY CONTR	1	9/ 6/73	2/26/73			-27.8
200	BASE RECEIVES FACILITY REQ REPORT	2	9/12/73	2/26/73			-27.8
300	FACILITY SURVEY COMPLETE	3	10/16/73	3/29/73			-27.8
400	BASE CP APPROVES FACILITY CONSTR	4	11/16/73	5/ 1/73			-27.8
600	CALL RECEIVED FROM MAJCOM	7	12/11/73	5/23/73			-27.8
800	INITIAL CD FORM 1391 RECEIVED BY MAJCOM	8	2/ 5/74	7/18/73	R 9/ 1/73		-27.8
900	INITIAL PROGRAM RECEIVED BY HQ USAF	9	4/22/74	10/ 3/73	R11/19/73		-27.8
1000	APPROPRIATED PROJECT BOOK COMPLETED	10	4/22/74	1[illegible]/73			-28.5
1100	APPROPRIATED PB RECEIVED BY MAJCOM	11	4/26/74	11/30/73	R11/19/73		-27.6
1400	FULL PB REVIEW COMPLETE	12	10/25/74	6/24/74			-17.4
1200	APPROPRIATED PB RECEIVED BY HQ USAF	13	7/26/74	1/10/74			-27.8
1300	DI ISSUED BY HQ USAF	14	8/19/74	2/26/74			-24.4
1500	FULL PB SUBMITTED TO MAJCOM	15	11/ 1/74	7/ 1/74	R 7/ 1/74		-17.4
1600	FULL PB SUBMITTED TO HQ USAF	16	1/27/75	8/ 1/74	R 9/ 1/74		-24.4
1700	MCP PROGRAM SUBMITTED TO OSD	17	3/26/75	10/ 1/74	R11/ 1/74		-24.4
1400	CONGR REVIEW COMPLETE	18	7/ 1/75	1/ 9/75			-24.4
1900	MCP PROGRAM SUBMITTED TO CONGRESS	19	7/ 8/75	1/15/75	R 1/15/75		-24.4
2000	CONGR RESOLVED MCP BILL	23	3/24/76	3/24/76			0.4
2100	PRESIDENT SIGNS MCP BILLS	21	3/29/76	1/ 1/75	R10/ 1/75		-24.7
2200	FUNDS APPORTIONED BY OMB	23	4/21/76	4/21/76			0.1
2210	FUNDS APPORTIONED BY HQ USAF	24	5/14/75	5/14/76			0.1
2300	IFB READY	25	7/19/76	7/19/76			0.4
2400	CME RESPONSE	26	7/29/76	8/ 3/76			0.5
2500	CONSTRUCTION HITS PREPARED	27	9/ 1/76	9/ 1/76			0.1
2600	CONTRACT AWARDED	28	9/ 9/76	9/ 9/76			0.1
2700	PRECONSTRUCTION CONFERENCE COMPLETE	29	9/21/76	9/21/76			0.0
2800	FACILITY CONSTRUCTED	31	9/29/78	9/29/78			0.0
3000	PRE-FINAL INSPECTION COMPLETE	31	10/ 6/78	10/ 6/78			0.0
3100	DEFICIENCIES CORRECTED	32	11/24/78	11/24/78			0.1
3200	FINAL INSPECTION COMPLETE	33	11/27/78	11/27/78			0.1
3300	FACILITY TRANSFER COMPLETE	34	12/ 4/78	12/ 4/78			0.0
3400	EQUIPMENT INSTALLATION COMPLETE	35	1/22/79	1/22/79			0.0
3500	FACILITY READY FOR USE	36	2/26/79	2/26/79			0.0
3600	CATEX INAPPLICABILITY CONFIRMED	37	10/16/73	3/ 6/74			20.1
3700	ENVIRONMENTAL ASSESSMENT COMPLETE	38	11/19/73	4/11/74			20.1
3800	PACE IPC APPROVED EA	39	11/26/73	4/12/74			20.1
4100	FONSI REVIEW COMPLETE	42	12/19/73	5/ 1/74			20.1
4200	PUBLIC COMMENT PERIOD COMPLETE	42	1/25/74	5/17/74			20.1
4300	DI ISSUED TO MAJCOM/AFPPE	44	8/20/74	6/ 5/74			-10.7
4310	DA NOTIFIED OF IT	45	8/28/74	6/12/74			-10.7

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION MEMORY — REPORTING ORGN. AFIT/LS — CONTRACT NO. UP1 — TERM JAN 16 YEAR CAL — REPORT DATE= 1/15/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE=1/15/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
4400	PRELIM DESIGN CONFERENCE COMPLETE	46	9/16/74	6/24/74			-11.7
4500	COMMENTS ON PRELIM DESIGN COLLECTED	47	10/ 8/74	8/ 1/74			-9.4
4600	DA RECEIVED COMMENTS	48	10/23/74	8/ 8/74			-11.7
4800	FINAL PRELIM DESIGN REVIEW COMPLETE	4C	1/21/75	11/ 1/74			-14.7
4900	PRELIM DESIGN COMMENTS COLLECTED	5(	2/19/75	12/ 3/74			-13.7
5000	DA RECEIVED COMMENTS	51	2/25/75	12/11/74			-13.7
5100	EARLY PRELIM DESIGN CONF COMPLETE	52	3/18/75	1/ 2/75			-13.7
5200	SEC D SIGN REPORT SUBMITTED TO AFRCE	53	3/19/75	1/ 3/75	11/29/74		-13.7
5300	SEC D SIGN REPORT SUBMITTED TO HQ USAF	54	3/20/75	1/ 6/75			-13.7
5400	PRELIM DESIGN REVIEW COMPLETE	5C	9/16/75	9/16/75			16.6
5500	COMMENTS COLLECTED	5(	9/17/75	11/ 5/75			16.6
5600	DA RECEIVED COMMENTS	57	7/15/75	11/12/75			16.6
5700	PRELIM DESIGN CONF COMPLETE	58	8/ 5/75	12/ 4/75			16.6
5800	FINAL DESIGN REVIEW COMPLETE	59	10/13/75	2/12/76			16.6
5900	COMMENTS COLLECTED	61	11/12/75	3/12/76			16.6
6000	FINAL DESIGN CONFERENCE COMPLETE	6(	12/ 4/75	4/ 2/76			16.6
6100	FINAL DESIGN APPROVED	62	1/30/76	5/27/76			16.6
6200	PROGRAM CONTRACT REVIEW COMPLT	63	8/18/76	8/18/76			0.1
6300	DA RECEIVES COMMENTS	64	11/18/75	9/18/76			16.6
6400	DESIGN COMPLETE	65	1/ 7/76	9/ 6/76	11/ 1/75		16.6
760	INITIAL 1391 COMPLETED	66	12/18/73	5/31/73			-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10180	SSA RECIPIENTS TO COMPETITIVE PROTO STRAT	1:9				10/18/69	-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10190	REVISED D-AFT DCP PREPARED	1:9	12/12/69	12/12/69			-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10200	DSARC REVIEW COMPLETE	1.1	12/18/69	12/18/69			-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10210	FINAL DCP 23A COMPLETED	112	3/17/70	3/17/74			-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10220	DCP 23A APPROVED BY DEPUTY SECDEF	113	6/ 9/70	6/ 9/70			-27.6
	CALCULATED IL BEFORE START OF 16YR CALANDAR						
10230	PMD ISSUED	114	6/15/70	6/15/70			-27.6
10240	A-X SPO FULLY ESTABLISHED	115	6/27/70	1/ 1/69			-27.6

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION MEMORY | REPORTING ORGN. AFIT/LS | CONTRACT NO. 001 | TEAM IAM 1L YEAR CAL | REPORT DATE- 1L/10/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,1L/10/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10250	RFP ISSUED TO INDUSTRY	116	5/ 8/70	1 /21/69			-27.8
10260	PROPOSALS TO AFP RECEIVED	117	8/12/70	1/29/70			-27.8
10270	SSAC RECOMMENDATIONS BRIEFEDED TO SSA	118	10/22/70	4/ 6/70			-27.8
10280	RFP FOR GUN ISSUED TO INDUSTRY	119	8/20/70	4/ 4/72			82.6
10290	DSARC I	120	12/15/70	1/26/70			-27.8
10300	CONTRACTORS SELECTED FOR CDR PROTOTYPE	121	12/16/70	5/29/70			-27.8
10310	AUTHORIZATION TO AWARD CONTRACT	122	12/22/70	1/ 4/70			-27.8
10320	PROTOTYPES ESIGNATED A-9 & A-10	123	2/26/71	8/12/70			-27.2
10330	GUN & DEVELOPING CONTRACTORS SELECTED	124	6/30/71	12/16/72			62.6
10340	A-9 ENGINE CONTRACT NEGOTIATED	125	1/19/72	7/ 2/71			-27.6
10350	A-1 FIRST FLIGHT	126	5/15/72	11/ 3/71			-27.2
10360	A-9 FIRST FLIGHT	127	6/12/72	11/29/71			-27.8
10370	PROPOSAL INSTRUCTIONS FOR FSD RELEASED	128	7/14/72	1/21/72			-2..6
10380	START AIR FORCE FLYOFF	129	10/19/72	4/ 3/72			-27.8
10390	FLYOFF COMPLETED	130	12/ 7/72	5/19/72			-27.8
10400	DSARC II	131	1/19/73	6/30/72			-27.8
10410	A-10 SELECTED FOR FSD	132	1/22/73	7/ 3/72			-27.8
10420	CONTRACT AWARD TO FSD FOR FSD	133	3/ 5/73	8/15/72			-27.8
10430	ENGINE CONTRACT AWARD TO GE	134	3/ 5/73	2/13/75			98.8
10440	GUN COMPETITIVE SHOOTOFF BEGINS	135	12/22/72	6/ 6/74			82.6
10450	GUN COMPETITIVE SHOOTOFF ENDS	136	4/ 2/73	11/15/74			82.6
10460	GE SELECTED FOR GUN FSD	137	6/ 4/73	1/21/75			82.6
10470	CONTRACT AWARD TO GE FOR GUN	138	6/11/73	1/28/75			82.6
10480	DESIGN LAYOUTS COMPLETE	139	5/11/73	1/14/74			72.4
10490	MAJOR FORGING RELEASE	140	6/13/73	11/15/74			72.4
10500	DESIGN RELEASE	141	7/11/73	12/19/74			72.4
10510	RECEIVE FORGINGS	142	10/10/73	4/29/75			77.6
10520	RELEASE STRUCTURAL DRAWINGS	143	2/21/74	7/25/75			72.4
10530	STRUCTURAL ASSEMBLY MANUFACTURE	144	8/27/74	1/ 5/76			68.4
10540	TOOL PLANNING, DESIGN & MANUFACTURE COMP	145	7/13/73	11/18/74			68.4
10550	RELEASE TOOLS	146	8/14/73	12/19/74			68.4
10560	MANUFACTURING DETAILS COMPLETE	147	9/14/73	1/22/75			68.4
10570	STRUCTURAL ASSEMBLY COMP	148	1,/27/[illegible]	5/27/75			68.4
10580	FINAL ASSEMBLY A/C #1 COMPLETE	149	9/27/74	2/ 4/76			66.4
10590	GROUND TEST COMPLETE	150	12/ 2/74	4/ 6/76			68.4
10600	FIRST FLIGHT A/C #1 (PREPROD)	151	12/16/74	4/20/76			68.4
10610	DELIVER A/C #11 (PREPROD)	152	10/16/75	2/17/77			68.4
10620	START OTSE TESTING	153	2/13/75	6/29/76			70.2
10630	COMPLETE OTSE TESTING	154	2/16/77	7/ 3/78			70.2
10650	STORE SEPARATION TEST COMPLETE	156	10/29/73	10/29/75			111.8

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 001 — TERM JAN 10 YEAR CAL — REPORT DATE- 12/10/69

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,10/11/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10660	COMPLETE FLUTTER TESTS	157	6/18/74	4/21/76			101.8
10670	STATIC ARTICLE TEST COMPLETE	158	7/ 1/75	7/ 3/78			153.4
10680	FATIGUE ARTICLE TEST PLANNING COMP	159	3/ 7/73	9/ 4/75			101.6
10690	FINAL ASSEMBLY COMPLETE	160	11/21/74	11/18/76			101.8
10700	1 LIFETIME FATIGUE TESTING COMP	161	7/31/75	7/21/77			101.4
10710	2 LIFETIMES FATIGUE TESTING COMP	162	1/ 8/76	12/29/77			101.0
10720	4 LIFETIMES FATIGUE TESTING COMP	163	7/ 9/76	7/ 3/78			101.4
10730	EGRESS STRUCTURAL TESTS COMP	164	10/22/73	11/14/75			105.8
10740	EGRESS T SYS DESIGN MODS COMP	165	4/16/73	5/ 9/[illegible]			1[illegible]5.8
10750	EGRESS TRACK TESTS COMP	166	3/27/74	4/26/76			105.8
10760	MISC TEST PLANNING COMP	167	3/19/73	5/21/75			113.6
10770	MISC TESTS COMPLETE	168	5/ 4/76	7/ 3/78			114.6
10780	RELEASE WINDOW SPECS	169	3/13/73	6/16/74			72.8
10790	ISSUE RFQ	170	3/13/73	6/16/74			72.8
10800	SELECT VENDOR	171	6/24/73	9/26/74			72.8
10810	ISSUE PURCHASE ORDER	172	5/ 1/73	10/ 7/74			72.8
10820	RELEASE INSTALLATION DRAWINGS	173	5/21/74	1/ 9/76			82.8
10830	QUALIFICATION TESTS COMPLETE	174	8/ 9/74	7/ 3/78			198.6
10840	RECEIVE COMPONENTS	175	6/24/74	12/ 1/75			72.8
10850	PRELIM DESIGN LOADS & CRITERIA SET	176	5/ 8/73	1[illegible]/14/74			72.8
10860	FINAL DESIGN LOADS & CRITERIA SET	177	1/10/74	7/25/75			77.2
10870	VIBRATION & ACOUSTIC ANALYSIS COMPLETE	178	9/24/74	7/ 3/78			192.4
10880	GUN LOCATION FREEZE	179	7/13/73	12/26/74			73.8
10890	GUN INSTALLATION DRAWING COMPLETE	180	5/21/74	11/28/75			73.6
10900	AVIONICS LONG LEAD ORDERS RELEASED	181	7/27/73	1/ 8/75			73.2
10905	AVIONICS INTEGRATION & TESTING COMPLETE	182	11/ 7/74	4/26/76			73.4
10910	DESIGN TO COST GOAL COMPLETE	183	3/27/74	12/16/75			87.4
10920	PDR	184	12/18/73	5/22/75			72.6
10930	PFR	185	3/21/74	8/25/75			72.6
10940	CDR	186	6/23/74	9/26/75			72.6
10950	SAFETY INSPECTION	187	12/14/74	3/19/76			72.6
10960	SPLC UPDATE	188	5/ 7/73	4/12/76			148.8
10970	PRELIM GUN INTERFERENCE DATA COMP	189	7/25/73	6/28/76			148.8
10980	APPCP ANALYSIS COMPLETE	190	12/18/73	11/19/76			148.8
10990	VULNERABLE AREA ANALYSIS	191	12/31/74	11/30/77			146.8
11000	FINAL GUN INTERFERENCE SPEC	192	8/ 4/75	7/ 3/78			146.8
11010	TRAINING PLANS COMPLETE	193	4/ 5/73	3/15/76			149.2
11020	FORMAL MTS DESIGN	194	7/ 9/73	6/14/76			149.2
11030	MTS DESIGN FREEZE	195	12/13/73	11/18/76			149.2
11040	MTS PDR	196	6/19/74	3/18/77			149.2

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 001 — TERM JAN 10 YEAR CAL — REPORT DATE- 10/10/69

LEVEL/SUMMARY ITEM 2

RELEASE DATE,10/10/69

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
11050	MTS CDR	19[illegible]	7/ 2/74	6/ 6/77			149.2
11060	MTS PCA/FCA	191	6/27/75	5/31/78			149.2
11070	DELIVERY OF MTS	191	7/31/75	7/ 3/78			149.2
11080	CFAE ORDERED	2[illegible]	8/13/73	1/23/75			73.2
11090	CFAE RECEIVED	21[illegible]	5/21/74	1 /29/75			73.2
11100	GUN PDR	212	8/ 8/73	3/26/75			62.6
11110	RECEIVE PHASE I GUN	213	11/29/73	7/16/75			62.6
11120	GUN CDR	214	9/25/74	5/11/76			62.6
11130	GUN DUAL TESTS COMPLETE	215	2/20/75	11/11/76			62.6
11140	ENGINE HARDWARE DESIGN COMP	205	6/ 5/73	3/10/75			98.8
11150	ENGINE CDR	217	6/25/73	6/ 5/75			98.8
11160	AEDC ENGINE EXPLORATORY TESTS COMP	203	6/ 2/74	3/12/76			98.8
11170	AEDC DUAL TESTS COMP	2[illegible]	7/30/74	7/ 7/76			98.8
11180	RECEIVE ENGINE #1	211	8/30/74	6/ 9/76			98.8
11190	HOT APPROVAL	211	11/ 1/74	1/11/76			98.8
11200	DSARC IIIA	212	7/ 8/74	3/26/76			87.4
11210	AUTHORIZATION FOR INITIAL PRODUCTION	213	7/30/74	4/19/76			87.4
11215	DSARC IIIB	214	2/12/76	1/27/77			87.4
11220	LONG LEAD ITEMS OPT 1 FUNDING POINT	215	11/ 1/74	7/21/76			87.4
11230	LONG LEAD ITEMS OPT 2 FUNDING POINT	216	7/31/75	4/15/77			87.4
11240	DESIGN TO COST DEMO	217	9/27/75	5/12/77			87.4
11250	FCA	218	11/30/75	7/29/77			89.2
11260	PCA	219	12/ 3/75	8/30/77			89.2
11270	FGTSE PROGRAM START	220	6/ 2/76	11/10/77			82.2
11280	FGTSE PROGRAM END (PHASE II)	221	2/16/77	7/ 3/78			70.2
11290	1ST PRODUCTION A/C DELIVERY	222	10/28/75	3/ 1/77			68.4
11300	OPERATIONAL UNIT IOC	223	2/20/79	2/20/79			0.0
11310	SATAF ACTIVATED	224	4/29/77	9/ 1/78			68.4
10640	COMPLETE WIND TUNNEL TESTS	215	5/21/73	5/22/75			101.8

APPENDIX G

INTEGRATED ACQUISITION NETWORK, CRASHED FACILITIES SUBNETWORK

This appendix is composed of two parts. The first part is the activity report. It displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time (t_e) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date (T_E) for completion of the activity.

ALLOWABLE DATE - latest allowable date (T_L) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date (T_A) is shown preceded by the letter A. If a required completion date has been specified, that date (T_R) is shown preceded by the letter R.

SLACK - slack for the activity (T_L - T_E)

TIME REMAINING - time from the report date until expected completion date (T_E) of the activity.

ORG. - identification of the organization responsible for this activity.

The second part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date (T_E) for the completion of the successor event of an activity.

LATEST ALLOWABLE DATE - latest allowable date (T_L) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event (T_A).

SLACK - slack for the event ($T_L - T_E$).

UNCLASSIFIED

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. [illegible]

1ST SORT KEY [illegible]
2ND SORT KEY [illegible]
3RD SORT KEY [illegible]
4TH SORT KEY [illegible]

EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	[illegible]
100	200	[illegible] REQUIREMENTS SENT TO BASE	[illegible]	[illegible].9	[illegible]/12/ 3	[illegible]		0.0	[illegible]
200	300	FACILITY [illegible]	.5[illegible]	[illegible]	1 /[illegible]/73	[illegible]		0.0	[illegible]
200	3600	[illegible] EVALUATION	.59	[illegible]	1 /[illegible]/73	[illegible]		26.0	[illegible]
300	400	[illegible] DETERMINATION	.5[illegible]	3.8	1[illegible]/ 5/73	11/[illegible]		0.0	[illegible]
400	600	[illegible] DEVELOPMENT	.5[illegible]	1.[illegible]	1[illegible]/73	11/[illegible]		0.0	[illegible]
600	700	[illegible] DEVELOPMENT	.5[illegible]	[illegible].9	11/[illegible]/73	11/[illegible]		0.0	[illegible]
700	800	[illegible] REVIEW BY MAJCOM	.5[illegible]	[illegible]	12/[illegible]/73	12/[illegible]		0.0	[illegible]
700	1000	[illegible] DEVELOPMENT	.5[illegible]	12.2	2/[illegible]	2/[illegible]		0.0	[illegible]
800	900	[illegible] & FORWARD TO HQ USAF	.5[illegible]	[illegible]	2/ [illegible]	2/ [illegible]		0.0	[illegible]
800	1100	[illegible]	.9[illegible]	[illegible]	[illegible]	[illegible]		11.6	[illegible]
900	1200	[illegible] BY HQ USAF	.5[illegible]	11.[illegible]	[illegible]	[illegible]		0.0	[illegible]
1000	1100	[illegible] TO MAJCOM	.39	[illegible].9	3/2[illegible]	[illegible]		7.3	[illegible]
1000	1400	[illegible]	.51	23.2	[illegible]	[illegible]		0.0	[illegible]
1100	1200	[illegible] TO HQ USAF	.39	[illegible]	[illegible]	[illegible]		7.3	[illegible]
1100	1500	[illegible] PR	.39	13.1	[illegible]/31/[illegible]	[illegible]		10.1	[illegible]
1200	1300	[illegible] SELECTION BY HQ USAF	.5[illegible]	[illegible].2	[illegible]/13/[illegible]	[illegible]		0.0	[illegible]
1300	1600	[illegible] BY HQ USAF	.5[illegible]	17.2	[illegible]/13/74	[illegible]		0.0	[illegible]
1300	4300	[illegible]	.5[illegible]	[illegible].2	[illegible]	[illegible]		0.0	[illegible]
1400	1500	[illegible] TO MAJCOM	.5[illegible]	[illegible].9	[illegible]/12/74	[illegible]		0.0	[illegible]
1500	1800	[illegible] TO HQ USAF	.5[illegible]	[illegible]	[illegible]/12/[illegible]	[illegible]		0.0	[illegible]
1600	1700	HQ USAF [illegible]	.5[illegible]	5.[illegible]	1 /25/[illegible]	[illegible]		0.0	[illegible]
1700	1800	[illegible] OF PROGRAM	.5[illegible]	1[illegible]	1/ 9/[illegible]	1/ [illegible]		0.0	[illegible]
1800	1900	[illegible] TO CONGRESS	.5[illegible]	[illegible].9	1/15/75	1/[illegible]	[illegible]	0.0	[illegible]
1900	2000	[illegible] REVIEW & APPROVAL	.5[illegible]	3[illegible].1	[illegible]/75	1[illegible]		0.6	[illegible]
2000	2100	[illegible] BY PRESIDENT	.5[illegible]	1.[illegible]	1 / 3/[illegible]	1 / [illegible]		0.6	[illegible]
2100	2200	[illegible] FUNDS	.5[illegible]	1.6	1[illegible]/75	1 /[illegible]		0.6	[illegible]
2200	2210	HQ USAF [illegible] FUNDS TO AFRCE	.5[illegible]	1.6	1 /[illegible]/75	1[illegible]		0.6	[illegible]
2210	6200	[illegible] PLANNING	.66	2.0	1[illegible]/75	1[illegible]		0.4	[illegible]
2300	2400	[illegible]	.7[illegible]	1.6	12/ 9/7[illegible]	12/[illegible]		1.4	[illegible]
2300	2500	[illegible] FORMULATION & RECEIPT	.50	5.[illegible]	1/ [illegible]/76	1/ [illegible]/76		0.0	[illegible]
2400	2500	[illegible] AWARD	.7[illegible]	2.[illegible]	12/[illegible]/75	1[illegible]		1.4	[illegible]
2500	2600	[illegible] REVIEWED & APPROVED	.5[illegible]	1.[illegible]	[illegible]/76	[illegible]		0.0	[illegible]
2600	2800	[illegible] PREPARATION	.5[illegible]	1.[illegible]	3/22/76	3/[illegible]		0.0	[illegible]
2800	2900	FACILITY [illegible]	.50	78.[illegible]	[illegible]	[illegible]		0.0	[illegible]
2900	3000	[illegible]	.5[illegible]	1.[illegible]	[illegible]/77	9/ [illegible]		0.0	[illegible]
3000	3100	[illegible] DEFICIENCIES	.5[illegible]	2.0	[illegible]/25/77	[illegible]		0.0	[illegible]
3100	3200	FINAL [illegible]	.5[illegible]	[illegible].2	[illegible]/77	[illegible]		0.0	[illegible]
3200	3300	FACILITY [illegible]	.5[illegible]	[illegible].9	9/ 1/77	9/ 1/77		0.0	[illegible]
3300	3400	EQUIPMENT INSTALLATION	.50	2.8	9/22/77	9/22/77		0.0	[illegible]
3400	3500	FACILITY AND EQUIPMENT CHECKOUT	.5[illegible]	3.2	1[illegible]/17/77	1[illegible]/17/77		0.0	[illegible]

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PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS — CONTRACT NO. [illegible]

INTEGRATED ACQUISITION NETWORK
1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

[illegible]
REPORT DATE [illegible]
RELEASE [illegible]

	EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE REQUIRED	DATE COMP/SCHED	SLACK	REMAINING [illegible]	[illegible]
	3600	11300	--DUMMY--	.50	[illegible]	1/27/77	[illegible]		0.0	[illegible]	
	3600	3700	[illegible] & FORCE DETERMINATION	.39	[illegible]	11/15/73	[illegible]		26.0	[illegible]	
	3700	3800	[illegible]	.39	[illegible].2	11/2[illegible]/73	[illegible]		26.0	[illegible]	
	3800	4100	[illegible] REVIEW [illegible]	.39	[illegible]	12/19/73	[illegible]		26.0	[illegible]	
	4100	4200	[illegible] PUBLIC COMMENTS	.39	5.[illegible]	1/2[illegible]/74	[illegible]		26.0	[illegible]	
	4200	1900	[illegible] DOCUMENTS	.39	[illegible]	2/ 1/74	[illegible]		26.0	[illegible]	
	4300	4810	[illegible] DESIGN AGENT	.50	1.1	[illegible]/21/74	[illegible]/21/74		0.0	[illegible]	
	4310	4400	[illegible] CONF	.50	[illegible]	[illegible]	[illegible]		0.0	[illegible]	
	4400	4500	[illegible] COLLECTS & REVIEWS COMM'S	.32	4.1	[illegible]	[illegible]		1.3	[illegible]	
	4400	4600	[illegible]	.50	5.3	[illegible]/16/74	[illegible]		0.0	[illegible]	
	4500	4600	[illegible] TO OA	.82	[illegible].9	[illegible]/ 9/74	[illegible]		1.3	[illegible]	
	4600	4800	[illegible] DESIGN	.50	12.[illegible]	1/11/74	[illegible]		0.0	[illegible]	
	4800	4900	[illegible] COLLECT & REVIEW COMMENTS	.50	4.1	11/ [illegible]	[illegible]		0.0	[illegible]	
	4800	5000	[illegible]	.70	4.1	11/ [illegible]	[illegible]		0.0	[illegible]	
	4900	5000	[illegible] TO OA	.50	[illegible].5	11/16/74	[illegible]		0.0	[illegible]	
	4900	5100	[illegible] PRELIM DESIGN CONF	.36	2.1	11/[illegible]/74	12/1[illegible]		1.8	[illegible]	
	5000	5100	[illegible] DESIGN CONTINUES	.50	3.[illegible]	12/1[illegible]/74	12/1[illegible]		0.0	[illegible]	
	5100	5200	[illegible] NOTIFICATION TO MAJCOM	.36	[illegible].2	12/11/74	1/ [illegible]		3.0	[illegible]	
	5100	5400	[illegible] COMMENTS	.50	8.6	2/11/75	2/11/[illegible]		0.0	[illegible]	
	5200	5300	[illegible] NOTIFICATION TO HQ USAF	.36	[illegible].2	12/12/74	1/ [illegible]		3.0	[illegible]	
	5300	1800	[illegible] NOTIFICATION TO OSD	.36	[illegible].6	12/17/74	1/ [illegible]		3.0	[illegible]	
	5400	5500	[illegible] COLLECT & REVIEW COMMENTS	.32	4.1	3/[illegible]/75	4/ 1[illegible]		3.0	[illegible]	
	5400	5600	[illegible]	.51	8.[illegible]	[illegible]/75	[illegible]		0.0	[illegible]	
	5500	5600	[illegible] TO OA	.32	[illegible].9	3/[illegible]/75	[illegible]		3.0	[illegible]	
	5500	5700	[illegible] DESIGN CONFERENCE	.99	2.1	3/2[illegible]/75	[illegible]		4.8	[illegible]	
	5600	5700	[illegible] CONTINUES	.50	3.[illegible]	[illegible]/25/75	[illegible]		0.0	[illegible]	
	5700	5800	[illegible] COMMENTS INCORP	.50	9.[illegible]	[illegible]/75	[illegible]		0.0	[illegible]	
	5800	5900	[illegible] COLLECT & REVIEW COMMENTS	.50	4.1	[illegible]/75	[illegible]		0.0	[illegible]	
	5800	6300	[illegible]	.38	4.5	[illegible]/75	4/12/[illegible]		0.5	[illegible]	
	5800	2210	[illegible] NOTIFICATION TO HQ USAF	.39	1.[illegible]	[illegible]/12/75	[illegible]		11.1	[illegible]	
	5900	6000	[illegible] CONFERENCE	.64	2.1	[illegible]/75	[illegible]		0.9	[illegible]	
	5900	6300	[illegible] TO OA	.50	[illegible].9	[illegible]/75	[illegible]		0.0	[illegible]	
	6000	6400	[illegible] INCORPORATED	.50	4.[illegible]	[illegible]/25/75	[illegible]		0.0	[illegible]	
	6100	8200	[illegible]	.50	3.2	11/14/75	[illegible]		0.0	[illegible]	
	6200	2300	[illegible]	.50	1.[illegible]	11/[illegible]/75	[illegible]		0.0	[illegible]	
	6300	6000	[illegible] CONTINUES	.56	2.1	[illegible]/75	[illegible]		0.0	[illegible]	
	6400	6100	[illegible] BY MAJCOM/AFPCE	.33	3.4	[illegible]/2[illegible]/75	[illegible]		0.0	[illegible]	
	10000	10190	[illegible] START		[illegible]		[illegible]	[illegible]	0.0	[illegible]	
I	10180	10190	[illegible] DRAFT [illegible]		[illegible].6	12/12/69	12/12/[illegible]		0.0	[illegible]	
I	10190	10240	[illegible] PREPARATION & ANALYSIS		26.[illegible]	[illegible]	[illegible]		1.0	[illegible]	

UNCLASSIFIED

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS CONTRACT NO. F-1

		ACTIV.	DATE	DATE		SLACK	
EVENT	SUCC.	PROB.	TIME	EXPECTED	ALLOWED	COMP/SCHED	L OR
10180	10200		1.8	12/31/72	12/[illegible]		0.0
10190	10210		13.8	[illegible]	[illegible]		0.4
10200	10220		15.6	[illegible]	[illegible]		0.0
10210	10230		3.8	[illegible]	[illegible]		0.4
10220	10250		4.8	[illegible]	[illegible]		0.0
10230	10240		1.8	[illegible]	[illegible]		0.0
10240	10250		1.8	[illegible]	[illegible]		0.0
10250	10260		18.6	[illegible]	12/ [illegible]		14.2
10260	10270		113.4	[illegible]	12/ [illegible]		3.2
10260	10280		13.8	[illegible]	9/12/73		0.0
10270	10290		9.8	[illegible]	[illegible]		0.0
10270	10290		7.2	[illegible]	[illegible]		0.0
10280	10350		35.8	[illegible]	[illegible]		14.2
10290	10300		1.2	[illegible]	[illegible]		0.0
10300	10310		1.8	[illegible]	[illegible]		0.0
10300	10340		54.4	[illegible]	[illegible]		1.4
10310	10320		9.2	[illegible]	[illegible]		0.6
10310	10340		55.8	[illegible]	[illegible]		0.0
10320	10330		62.4	[illegible]	[illegible]		0.6
10320	10380		65.2	[illegible]	[illegible]		1.0
10330	10440		84.2	[illegible]	[illegible]		14.2
10340	10360		2.4	[illegible]	[illegible]		0.0
10350	10380		21.2	[illegible]	[illegible]		0.6
10360	10380		18.4	[illegible]	[illegible]		0.0
10370	10420		29.8	[illegible]	[illegible]		3.2
10380	10390		6.8	[illegible]	12/ [illegible]		0.0
10390	10400		9.8	[illegible]	[illegible]		0.0
10400	10410		6.2	[illegible]	[illegible]		0.0
10410	10420		6.8	[illegible]	[illegible]		0.0
10410	10430		5.8	[illegible]	[illegible]		30.4
10420	100	.50	25.8	[illegible]	[illegible]		0.0
10420	10480		8.8	[illegible]	[illegible]		4.0
10420	10540		16.4	[illegible]	[illegible]		0.0
10420	10660		11.8	[illegible]	[illegible]		38.4
10420	10670		118.2	[illegible]	[illegible]		85.0
10420	10680		26.2	[illegible]	[illegible]		32.6
10420	10720		8.8	[illegible]	[illegible]		36.6
10420	10750		2.8	3/19/73	[illegible]		2.2
10420	10770		1.2	3/13/73	4/12/73		4.4
10420	10840		9.8	[illegible]	[illegible]		4.4

UNCLASSIFIED

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFFTC/LS — CONTRACT NO. F-1

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LATEST SLACK
4TH SORT KEY EXPECTED DATE (EED)

PRED. EVENT NO.	SUCC. EVENT NO.	ACTIVITY DESCRIPTION	ACTIV. PROB.	TIME EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	UNC.
10420	10870	GUN QUALIFICATION ELIMINATION	18.4	7/13/73	8/1/73		4.6	4 days	
10420	10880	RELEASE BY QUALS FIRERS	26.4	7/27/73	8/1/73		4.8	3 days	
10420	10810	INITIAL PROOF W/ EXPLOSION	54.8	9/27/73	8/ 1/74		19.0	44 w	
10420	10820	CONTRACT MODIFICATION & PLANNING	46.2	12/10/73	1/1/74		4.2	21 days	
10420	10960	QUALIFICATION FIRING	9.7	1/ 7/73	12/ 1/74		80.4	1 year	
10420	11010	RELEASE TRAINING PLANS	4.6	1/ 5/73	11/ 1/74		80.8	47 days	
10430	11140	FINAL MODIFICATION TO ENGINE DESIGN	4.6	1/ 5/73	11/ 1/73		30.4	17 days	
10440	10450	GUN COMPETITIVE FLYOFF	13.8	1/ 2/73	7/1/74		14.2	11 w	
10450	10460	GUN COMPETITIVE FLYOFF EVAL & SELECTION	8.8	1/ 4/73	4/1/74		14.2	11 w	
10460	10470	FINAL CONTRACT PREP & NEGOTIATION	1.6	1/15/73	3/ 1/74		14.2	63 w	
10470	11100	RELEASE MODIFICATION TO GUN DESIGN	8.2	1/ 8/73	11/1/73		14.2	19 w	
10480	10490	FIRING MAJOR COMPONENT DESIGN	4.6	1/13/73	7/1/74		4.8	27 w	
10480	10500	FAILURE TESTS	4.6	1/17/73	8/1/74		4.8	1 year	
10490	10510	MANUFACTURE AND DELIVER FORGINGS	17.6	1/16/73	1/23/74		9.2	1 w	
10500	8000	--DUMMY--	6.4	7/17/73	8/30/73		107.2	1 year	
10500	10520	RELEASE STRUCTURAL DRAWINGS	70.4	2/21/74	3/31/74		4.0	22 days	
10510	10570	ASSEMBLE MAJOR COMPONENTS	4.0	11/15/73	1/23/74		9.2	4 days	
10520	10530	RELEASE FINAL ASSEMBLY PLANS & JIGS	22.2	1/31/74	3/31/74		4.0	2 w	
10530	10580	FINAL ASSEMBLY A/C #1	4.4	1/27/74	9/30/74		0.0	26 w	
10540	10550	TOOL RELEASE & TRY-OUT	4.4	1/14/73	8/1/73		0.0	29 w	
10550	10560	DEVELOP MANUFACTURING DETAILS	4.4	9/24/73	9/1/73		0.0	- w	
10560	10570	MANUFACTURE COMPONENTS	17.8	1/23/74	1/23/74		0.0	41 w	
10570	10520	ASSEMBLE SUBSTRUCTURE	36.4	1/17/74	8/27/74		0.0	26 w	
10580	10590	GROUND TESTING	8.6	12/ 6/74	12/ 3/74		0.0	26 w	
10590	10600	PREPARATION FOR FIRST FLIGHT	2.8	12/16/74	12/1/74		0.0	24 w	
10600	10610	PRODUCTION AIRCRAFT CONSTRUCTION	42.6	1 /16/75	11/1/74		0.0	1 year	
10600	10620	INITIAL AIRCRAFT TESTING & DELIVERY	8.2	1/13/75	2/3/75		1.8	4 days	
10610	10630	DELIVERY & TEST OF LAST PREPROD A/C	87.2	2/ 9/77	3/ 1/77		2.8	3 days	
10610	11290	MANUFACTURE PRODUCTION A/C # 1	1.6	1 /26/75	11/31/		0.0	1 year	
10620	10630	DELIV OF PREPRODUCTION AIRCRAFT	112.0	2/16/77	3/ 1/77		1.8	22 days	
10630	11280	--DUMMY--	1.0	2/16/77	3/ 1/77		1.8	22 days	
10640	10650	STORE SEPARATION TESTS	22.2	1/29/73	6/2/74		33.4	2 year	
10640	10660	FLUTTER TESTS	24.	1/18/74	12/1/74		33.4	44 w	
10650	10680	--DUMMY--	1.6	4/16/74	12/1/74		33.4	23 w	
10670	10630	--DUMMY--	1.0	1/ 1/75	3/ 1/77		85.0	2 year	
10680	10690	FATIGUE ARTICLE FABRICATION & ASSEMBLY	51.2	11/21/74	7/1/77		32.6	61 w	
10690	10700	FATIGUE TESTING	34.8	1/31/75	3/22/77		32.6	57 w	
10700	10710	FATIGUE TESTING CONTINUES	22.2	1/ 8/76	8/1/77		32.6	91 w	
10710	10720	FATIGUE TESTING CONTINUES	26.2	1/ 9/76	3/ 1/77		32.6	65 w	
10720	10610	--DUMMY--	8.6	7/ 9/76	3/ 1/77		32.6	343 w	

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. AFIT/LS CONTRACT NO. 0 1

INTEGRATED (CONSIST.LE NETWORK
1ST SORT KEY PRECEDING EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (EF)

EVENT PRED.	EVENT SUC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	TIME EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	O.D.
10725	10730	[illegible]	26.2	1 /22/73	7/11/		36.6		
10730	10740	[illegible]	21.8	/6/74	12/1 /74		36.6		
10740	10600	--[illegible]--	[illegible]	7/27/74	12/1 /74		36.6		
10750	10760	[illegible]	159.[illegible]	1/ /74	3/ /77		42.2		
10760	10630	--[illegible]--	[illegible]	1/ 4/76	3/ /77		42.2		
10770	10780	--[illegible]--	[illegible]	7/13/73	6/13/74		4.4		
10770	10790	[illegible]	6.[illegible]	4/24/73	5/2 /74		4.4		
10780	10800	[illegible]	7.[illegible]	1/ 1/73	6/ 1/74		4.4		
10790	10800	[illegible]	1.[illegible]	[illegible]	[illegible]		4.4		
10790	10810	[illegible]	54.6	7/23/74	9/2 /74		13.6		
10800	10850	[illegible]	58.2	6/24/74	7/23/74		4.4		
10810	10830	--[illegible]--	[illegible]	7/24/74	9/2 /74		13.6		
10810	10820	[illegible]	11.2	1/ 9/74	3/ 1/77		130.2		
10820	10630	--[illegible]--	[illegible]	1/ 9/74	3/ 1/77		130.2		
10830	10600	[illegible]	9.[illegible]	6/27/74	9/2 /74		4.4		
10840	10480	--[illegible]--	[illegible]	1/ 4/73	6/ 1/73		4.4		
10840	10850	[illegible]	35.2	1/16/74	3/21/74		8.8		
10850	10820	--[illegible]--	[illegible]	1/16/74	3/21/74		8.8		
10850	10860	[illegible]	36.8	6/25/74	8/ 1/74		124.0		
10860	10630	--[illegible]--	[illegible]	5/24/74	8/ 1/74		124.0		
10870	10880	PREPARE GUN INSTALLATION DRAWING	43.8	7/22/74	9/2 /74		4.6		
10880	10590	GUN GROWTH EXS	22.2	1 /26/74	12/ 2/		4.6		
10890	10900	AVIONICS INTEGRATION & TESTING	55.2	1/ 7/74	12/10/74		5.0		
10890	11080	RECEIVER TESTS	2.2	6/13/73	1/1 /74		4.8		
10900	10600	--[illegible]--	[illegible]	1/ 7/74	12/1 /74		5.0		
10910	11200	REVIEW PROTH FSE DATA	16.2	7/ 8/74	12/2 /74		19.0		
10910	11220	PREPARE LOIS LEAD ORDER #1	31.8	1/ 1/74	3/2 /74		19.0		
10920	10930	[illegible]	13.[illegible]	7/21/74	9/13/74		4.2		
10930	10940	[illegible]	6.[illegible]	7/23/74	9/24/74		4.2		
10940	10950	[illegible]	24.2	1 /14/74	11/1 /74		4.2		
10950	10600	[illegible]	6.4	1/1 /74	12/10/74		4.2		
10960	10970	DETERMINE GUN INTERFERENCE DATA	11.[illegible]	/23/73	2/2 /74		80.4		
10970	10980	AERO ANALYSIS	21.2	12/10/73	7/11/74		80.4		
10980	10990	VULNERABLE AREA ANALYSIS	52.2	12/3 /74	7/2 /74		80.4		
10990	11000	DETERMINE FINAL GUN INTERFERENCE DATA	31.4	1/ 4/75	3/ 1/77		80.4		
11000	10630	--[illegible]--	[illegible]	1/ 4/75	3/ 1/77		80.4		
11010	11020	PRELIM DESIGN OF FORMAL MAINT TRAIN SYST	13.[illegible]	7/ 9/73	2/11/74		80.8		
11020	11030	FINAL AFS DESIGN	22.6	12/13/73	7/1 /74		80.8		
11030	11040	FINALIZE MTD DESIGN DETAILS	17.[illegible]	4/15/74	11/1/74		80.8		
11040	11050	MTS PLANNING & DESIGN REVIEW	11.[illegible]	7/ 2/74	2/ 5/75		80.8		

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PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. [illegible]

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

PRED. EVENT	SUCC. EVENT	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	[illegible]
11050	11060	MTS CONSTRUCTION		50.2	1/21/75	1/ /77		80.8	[illegible]
11060	11070	MTS FINAL INSTALLING & DELIVERY		4.6	1/ /75	3/ 1/77		80.8	[illegible]
11070	10630	--DUMMY--		0.0	7/21/75	3/ 1/77		80.8	[illegible]
11080	11090	MANUFACTURE & DELIVER AVIONICS		39.2	1/21/74	[illegible]		4.8	[illegible]
11090	10580	INITIAL AVIONICS		13.2	1/23/74	[illegible]		4.8	[illegible]
11100	11110	PREPRODUCTION GUN FABRICATION		15.5	11/29/73	[illegible]		14.2	[illegible]
11110	11120	FIELDING GUN DESIGN		51.6	1/21/74	1/ [illegible]		14.2	[illegible]
11120	11130	TEST & QUALIFY GUN		21.6	2/26/75	[illegible]		14.2	[illegible]
11130	10630	--DUMMY--		0.0	2/28/75	3/ 1/77		102.2	[illegible]
11130	12000	CONTINUING GUN PRODUCTION & DELIVERY		121.1	7/ 1/77	1 / [illegible]		14.2	[illegible]
11140	11150	FIELDING ENGINE DESIGN		11.2	1/25/73	1/31/7[illegible]		30.4	[illegible]
11150	11160	FIELDING ENGINE TESTING		39.1	/ 2/74	11/ [illegible]		30.4	[illegible]
11160	11170	ENGINE QUALIFICATION TESTING		18.1	7/31/74	3/ [illegible]/75		30.4	[illegible]
11170	11180	PREPRODUCTION ENGINE FABRICATION		4.6	7/31/74	[illegible]		30.4	[illegible]
11170	11190	ENGINE QUALIFICATION TESTING		12.1	1/23/74	5/1 /7[illegible]		31.8	[illegible]
11180	11190	PREPRODUCTION ENGINE TESTING		8.8	11/ 1/74	5/1 /7[illegible]		30.4	[illegible]
11190	10630	--DUMMY--		0.0	11/ 1/74	3/ 1/77		118.4	[illegible]
11190	12000	CONTINUING ENGINE PRODUCTION & DELIVERY		121.1	3/1/77	[illegible]		30.4	[illegible]
11200	11210	SATISFACTION OF DSARC RECOMMENDATIONS		3.2	[illegible]	12/1[illegible]		19.0	[illegible]
11210	11220	AUTHORIZE LONG LEAD ORDER		13.4	11/ 1/74	[illegible]		19.0	[illegible]
11215	11270	SATISFACTION OF DSARC RECOMMENDATIONS		2.0	2/ /75	[illegible]		19.0	[illegible]
11220	11230	PREPARE LONG LEAD ORDER #2		37.6	/21/75	12/[illegible]		19.0	[illegible]
11220	11230	--DUMMY--		0.0	11/ 1/74	1[illegible]		50.0	[illegible]
11230	11240	PROGRAM COST VERIFICATION		3.0	[illegible]/27/75	1/[illegible]		19.0	[illegible]
11240	11215	REVIEW OF FSD DATA		23.2	2/12/76	[illegible]		19.0	[illegible]
11240	11250	REVIEW OF TEST DATA		9.1	1 /3 /75	3/1 /7[illegible]		20.8	[illegible]
11250	11260	REVIEW OF [illegible] DATA		[illegible]	12/ 3/75	[illegible]		20.8	[illegible]
11260	11215	PREPARATION FOR DSARC REVIEW		9.1	1/3 /76	[illegible]		20.8	[illegible]
11270	11280	[illegible]		32.8	11/23/76	[illegible]		13.8	[illegible]
11280	11300	INITIAL OPERATIONAL CADRE TRAINING & CJA		32.1	1 / 3/77	1[illegible]		1.8	[illegible]
11240	11270	IOT&E		21.6	[illegible]/ 2/76	[illegible]		13.8	[illegible]
11290	11310	EQUIP TEST & TRAINING UNITS		77.1	1/29/77	[illegible]		0.0	[illegible]
11290	12000	CONTINUING AIRCRAFT PRODUCTION		96.0	7/ 5/77	[illegible]		14.4	[illegible]
11300	12000	--DUMMY--	.78	0.0	1/11/77	[illegible]		0.0	[illegible]
11310	2800	SATISFACTION TO MEET IOC (PRECEDENCE)		0.0	1/29/77	[illegible]		12.5	[illegible]
11310	11300	FINAL PREPARATION & COORDINATION		23.4	10/17/77	[illegible]		0.0	[illegible]

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PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION MEMORY — REPORTING ORGN. AFTC/LS — CONTRACT NO. N/A

LEVEL/SUMMARY III 22

RELEASE DATE 12/31/73

EVENT NO.	EVENT DESCRIPTION	MILESTON CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
100	FACILITY [illegible] BY CONTR	1	9/ 6/73	9/ 6/73			0.0
200	FULL [illegible] FACILITY [illegible]	2	9/12/73	9/12/73			0.0
300	FACILITY SURVEY COMPLETE	3	11/15/73	11/15/73			0.0
400	BASE CE [illegible] FACILITY CONSTR	4	11/ 9/73	11/ 9/73			0.0
500	CWE [illegible] FROM MAJCOM	7	11/16/73	11/16/73			0.0
600	INITIAL [illegible] RECEIVED BY MAJCOM	8	12/27/73	12/27/73			0.0
900	INITIAL [illegible] BY HQ USAF	9	2/ 8/74	2/ 8/74			0.0
1000	[illegible] PROJECT DATA COMPLETED	11	2/21/74	2/21/74			0.0
1100	AF [illegible] BY MAJCOM	11	2/27/74	3/15/74			7.3
1400	FULL [illegible]	12	2/ 6/74	2/ 6/74			0.0
1200	AF [illegible] BY HQ USAF	13	4/26/74	4/26/74			0.0
1300	DI IS [illegible] BY HQ USAF	14	5/13/74	5/13/74			0.0
1500	FULL [illegible] TO MAJCOM	15	8/12/74	8/12/74			0.0
1600	FULL [illegible] TO HQ USAF	16	8/13/74	8/13/74			0.0
1700	PEP [illegible] SUBMITTED TO OSD	17	10/25/74	10/25/74			0.0
1800	CONFERENCE COMPLETE	18	11/ 9/73	11/ 9/73			0.0
1900	PEP [illegible] SUBMITTED TO CONGRESS	19	1/15/75	1/15/75	2/15/75		0.0
2000	CHANGE TO [illegible] MOD REQ	20	9/30/75	10/ 6/75			0.6
2100	[illegible] MOD REQS	21	11/ 3/75	11/ 6/75			0.6
2200	FUNDS ALLOCATED BY OSD	23	10/15/75	10/21/75			0.6
2210	FUNDS ALLOCATED BY HQ USAF	24	10/27/75	10/31/75			0.6
2300	IFB R ADV	25	11/26/75	11/26/75			0.0
2400	CWE R[illegible]	26	12/ 5/75	12/18/75			1.4
2500	CONSTRUCTION PERMIT RECEIVED	27	1/ 5/76	1/ 5/76			0.0
2600	CONTRACT AWARDED	28	1/12/76	1/16/76			0.0
2700	FRENCH [illegible] COMPLETE	29	1/22/76	1/22/76			0.0
2900	FACILITY [illegible]	31	7/25/77	7/25/77			0.0
3000	[illegible] COMPLETE	31	9/ 1/77	9/ 1/77			0.0
3100	[illegible]	32	9/25/77	9/25/77			0.0
3200	FINAL [illegible]	33	9/26/77	9/26/77			0.0
3300	FACILITY TURNED OVER	34	9/ 1/77	9/ 1/77			0.0
3400	EQUIP [illegible] COMPLETE	35	9/22/77	9/22/77			0.0
3500	FACILITY READY FOR USE	36	11/17/77	11/17/77			0.0
3600	CRITEX [illegible] CONFIRMED	37	10/15/73	8/19/74			26.0
3700	[illegible]	38	11/19/73	8/19/74			26.0
3800	[illegible]	39	11/23/73	8/23/74			26.0
4100	FINAL REVIEW COMPLETE	42	12/19/73	8/23/74			26.0
4200	PUBLIC COMMENT PERIOD COMPLETE	43	1/25/74	8/30/74			26.0
4300	DI IS USED TO MAJCOM/AFLC	44	5/14/74	5/14/74			0.0
4310	DI NOTIFIED OF DI	45	5/21/74	5/21/74			0.0

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION [illegible] REPORTING ORGN. AFTA/LS CONTRACT NO. [illegible] TERM IRAN 1 [illegible] REPORT DATE [illegible]

LEVEL/SUMMARY ITEM 2/

RELEASE DATE: [illegible]

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
4400	PRELIMINARY DESIGN REVIEW COMPLETE	46	6/ 3/74	6/ 3/74			0.0
4500	CONTRACT (RFP) PROPOSAL COLLECTED	47	7/ 2/74	7/11/74			1.3
4600	DAB PRELIMINARY COMMENTS	48	7/12/74	7/11/74			0.0
4400	EARLY PRELIM DESIGN REVIEW COMPLETE	49	10/11/74	10/11/74			0.0
4900	PRELIMINARY PLANNING DATA COLLECTED	51	11/ 6/74	11/ 6/74			0.0
5000	DAB FINAL COMMENTS	51	11/18/74	11/18/74			0.0
5100	EARLY PRELIM DESIGN DONE COMPLETE	52	12/ 1/74	12/ 1/74			0.0
5200	RFP PACKAGE REPORT SUBMITTED TO AFSCE	53	12/11/74	12/ 3/74			8.0
5300	RFP PACKAGE REPORT SUBMITTED TO HQ USAF	54	12/12/74	12/ 3/74			8.0
5400	PRELIMINARY DESIGN REVIEW COMPLETE	55	2/11/75	2/11/75			0.0
5500	CONTRACTS COLLECTED	56	3/11/75	12/ 1/74			3.0
5600	DAB PRELIMINARY COMMENTS	57	4/ 8/75	4/ 8/75			0.0
5700	PRELIMINARY DESIGN DONE COMPLETE	58	4/29/75	4/29/75			0.0
5800	FINAL DESIGN REVIEW COMPLETE	59	7/ 8/75	7/ 8/75			0.0
5900	CONTRACTS COLLECTED	60	8/ 1/75	12/ 1/74			0.0
6000	FINAL DESIGN DONE, MOD COMPLETE	61	9/26/75	7/28/75			0.0
6100	FINAL DESIGN REVIEW	62	10/22/75	1/22/79			0.0
6200	PROJECT/SERVICE CONTRACT REVIEW COMPLT	63	11/14/75	11/14/75			0.0
6300	FAB PREPLAN COMMENTS	64	8/12/75	8/12/75			0.0
6400	DAB FINAL MEETS	65	8/29/75	8/29/75			0.0
700	INITIAL 9351 COMPLETED	06	11/26/73	11/26/73			0.0
10160	SSA PROPOSAL RFP TO COMPETITIVE PROTO STRAT	109				10/1/74	0.0
10190	REVISED RELEASE RFP TO RELEASE	110	12/12/69	12/12/69			0.0
10200	FSA PROPOSAL REVIEW COMPLETE	111	12/18/69	12/18/69			0.0
10210	FINAL DCA ESR COMPLETED	112	3/17/71	7/19/71			0.4
10220	DCP ESR APPROVED BY DEPUTY SECDEF	113	6/ 9/71	6/ 9/71			0.0
10230	RFP ISSUED	114	4/15/71	4/15/71			0.0
10240	A-X RFP FULLY DISTRIBUTED	115	4/27/71	4/27/71			0.0
10250	RFP ISSUED TO INDUSTRY	116	6/ 8/71	6/ 8/71			0.0
10260	RESPONSE TO RFP RECEIVED	117	8/12/71	8/12/71			0.0
10270	SSAC RECOMMENDATIONS DELEGATED TO SSA	118	11/22/71	11/22/71			0.0
10280	RFP FOR CHN ISSUED TO INDUSTRY	119	6/2/71	12/ 3/71			14.2
10290	[illegible]	120	12/15/71	12/15/71			0.0
10300	CONTRACTS SELECTED FOR DEM PROTOTYPE	121	12/16/71	12/16/71			0.0
10310	AUTHORIZATION TO AWARD CONTRACT	122	12/22/71	12/22/71			0.0
10320	PROTOTYPE 1 TESTBED A-9 & A-10	123	2/26/71	2/ 3/71			0.6
10330	COMPETITIVE OFFERING CONTRACTORS SELECTED	124	4/3.71	4/ 6/71			14.2
10340	A-9 & A-10 CONTRACT NEGOTIATED	125	1/19/72	1/19/72			0.0
10350	A-1 FIRST FLIGHT	126	5/15/72	5/16/72			0.6
10360	A-9 FIRST FLIGHT	127	6/12/72	6/12/72			0.0

PERT/TIME
MILESTONE REPORT

REPORTING ORGN. 4F17/LS | CONTRACT NO. C11 | ITEM [illegible] | REPORT DATE = [illegible]

INTEGRATED ACQUISITION [redacted]

LEVELS SUMMARY ITEM 2/

(RELEASE DATE, 12/11/73)

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10370	PRELIMINARY INTERFACE REQ FOR RELEASED	128	7/14/72	12/ 7/72			3.2
10380	STA 7.5 FLIGHT SERVICE	129	10/19/72	1 /19/73			0.0
10390	FLY BY COMPLETE	130	12/ 7/72	12/ 7/72			0.0
10400	DAC C IT	131	1/19/73	1/19/73			0.0
10410	A-4 SEL CIRC FOR ESD	132	1/22/73	1/22/73			0.0
10420	CONTRACT AWARD FOR ESD FOR ESD	133	3/ 5/73	3/ 5/73			0.0
10430	ESTD CONTRACT AWARD TO GE	134	3/ 5/73	1 / /73			80.4
10440	GUN COMPLETE SHIP OFF A GINS	135	12/22/72	6/ 4/73			14.2
10450	GUN COMPLETE AT FACTORY FOR	136	4/ 2/73	5/18/73			14.2
10460	GE SELECTED FOR GUN ESD	137	6/ 4/73	5/18/73			14.2
10470	CONTRACT AWARD TO GE FOR GUN	138	6/11/73	5/22/73			14.2
10480	DESIGN COMPLETE	139	5/11/73	6/ 6/73			4.0
10490	MAJOR DESIGN RELEASE	140	6/13/73	7/12/73			4.0
10500	DESIGN FREEZE	141	7/17/73	8/ 6/73			4.0
10510	REQUIRE REVIEWS	142	11/14/73	12/26/73			9.2
10520	REL ARE STRUCTURAL DRAWINGS	143	2/21/74	3/21/74			4.0
10530	STRUCTURAL ASSEMBLY MATERIALS	144	8/27/74	9/27/74			0.0
10540	TOOL PLANNING DESIGN & MANUFACTURE COMP	145	7/13/73	8/13/73			0.0
10550	RELEASE TOOLS	146	8/14/73	9/14/73			0.0
10560	MANUFACTURING DRAWS COMPLETE	147	9/14/73	9/14/73			0.0
10570	STRUCTURAL ASSEMBLY COMP	148	1/23/74	1/23/74			0.0
10580	FINAL ASSEMBLY OF #1 COMPLETE	149	9/27/74	9/27/74			0.0
10590	GROUND TEST COMPLETE	150	12/ 2/74	12/ 2/74			0.0
10600	FIRST FLIGHT A/C #1 (PLANNED)	151	12/16/74	12/16/74			0.0
10610	DELIV A/C #1 (PLANNED)	152	1/31/75	1 /31/75			0.0
10620	START DEM TESTING	153	2/13/75	2/26/75			1.8
10630	COMPL DEM TESTING	154	2/28/77	3/ 1/77			1.8
10650	STORE SEPARATION TEST COMPLETE	156	10/29/73	6/25/74			33.4
10660	COMPLETE FLUTTER TESTS	157	6/18/74	12/16/74			33.4
10670	STATIC ARTICLE TEST COMPLETE	158	7/ 1/75	3/ 1/77			85.0
10680	FATIGUE ARTICLE TEST PLANNING COMP	159	9/ 7/73	6/21/74			32.6
10690	FINAL ASSEMBLY COMPLETE	160	11/21/74	6/16/75			32.6
10700	1 LIFETIME FATIGUE TESTING COMP	161	7/3.75	3/22/76			32.6
10710	2 LIFETIME FATIGUE TESTING COMP	162	1/ 6/76	6/24/76			32.6
10720	4 LIFETIMES FATIGUE TESTING COMP	163	7/ 5/76	3/ 1/77			32.6
10730	ECHELON CAPABILITY TESTS COMP	164	10/22/73	6/11/74			86.6
10735	EGRESS TEST DESIGN MODS COMP	165	6/18/73	1/ 7/74			86.6
10740	EGRESS TRACK TESTS COMP	166	3/27/74	10/16/74			86.6
10750	MISC TEST PLANNING COMP	167	3/19/73	1/17/74			42.2
10760	MISC TESTS COMPLETE	168	9/ 4/76	3/ 1/77			42.2

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. W11

LEVEL/SUPPLY ITEM 2/

RELEASE DATE 1[illegible]

EVENT NO.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
10770	RELEASE VENDOR SPECS	1[illegible]	3/13/73	[illegible]/12/73			4.4
10780	ISSUE RFQ	1[illegible]	3/13/73	[illegible]/12/73			4.4
10790	SELECT VENDOR	171	4/24/73	[illegible]/24/73			4.4
10800	ISSUE PURCHASE ORDER	172	5/ 1/73	[illegible]/ 1/73			4.4
10910	RELEASE INSTALLATION DRAWINGS	174	5/21/74	5/21/74			13.6
10820	QUALIFICATION TESTS COMPLETE	175	8/ 9/74	8/ 1/73			130.2
10830	RECEIVE EQUIPMENT	176	5/24/74	7/23/74			9.4
10840	RELEASE GUN LINES & ELECTRIC SET	177	5/ 8/73	[illegible]/ 1/73			4.4
10850	FINAL DESIGN REVIEW & CRITERIA SET	178	1/18/74	3/21/74			8.8
10860	VULNERABILITY & SURVIVED ANALYSIS COMPLETE	179	9/24/[illegible]	[illegible]/ 1/73			124.8
10870	GUN LOADER FREEZE	180	7/13/73	[illegible]/13/73			4.8
10880	GUN INSTALLATION DRAWING COMPLETE	181	5/21/74	6/24/74			4.6
10890	AVIONICS SYSTEMS LEAD ITEMS RELEASED	182	[illegible]/22/73	8/20/73			4.8
10900	AVIONICS INTEGRATION & TESTING COMPLETED	183	11/ 7/74	12/10/74			5.8
10810	DESIGN IN FOCAL POINT COMPLETE	184	3/27/74	[illegible]/ 6/74			19.0
10920	PDR	185	12/18/73	1/18/74			4.2
10930	FDR	186	5/21/74	[illegible]/19/74			4.2
10940	CDR	187	6/28/74	[illegible]/28/74			4.2
10950	SAFETY INSPECTION	188	11/[illegible]/74	1/[illegible]/74			4.2
10960	SPEC UPDATE	189	5/ 1/73	12/ 6/74			80.4
10970	FINAL GUN INTERFACE DATA COMP	190	7/[illegible]/73	7/[illegible]/73			80.4
10980	ARMOR ANALYSIS COMPLETE	191	12/10/73	7/10/74			80.4
10990	VULN PRE- AMEN ANALYSIS	192	12/3/[illegible]	/28/[illegible]			80.4
11000	FINAL GUN INTERFACE SPEC	193	8/ 6/75	7/ 1/77			80.4
11010	TRAINING PLANS COMPLETE	194	4/ 5/73	11/ 6/74			80.8
11020	FINAL MTS DESIGN	195	7/ 9/73	7/11/75			80.8
11030	MTS C SIG RELEASE	196	12/13/73	7/17/75			80.8
11040	MTS F R	197	4/15/74	11/17/75			80.8
11050	MTS CDR	198	7/ 2/74	2/ 5/76			80.8
11060	MTS SYS/FCA	199	6/26/75	1/26/77			80.8
11070	DELIV BY CF MTS	200	7/31/75	7/ 1/77			80.8
11080	CFAE RFQ REL	201	9/17/73	9/17/73			4.8
11090	CFAE RECEIVED	202	5/21/74	6/28/74			4.8
11100	GUN FDR	203	8/ 6/73	[illegible]/[illegible]/73			14.2
11110	RECEIVE PHASE I GUN	204	11/29/73	[illegible]/12/74			14.2
11121	GUN CDR	205	3/25/74	5/ 6/75			14.2
11130	GUN QUAL TESTS COMPLETE	206	12/26/75	6/11/75			14.2
11140	ENGINE MI CHARG DESIGN COMP	207	4/ 5/73	11/ 9/73			30.4
11150	ENGIN CDR	208	5/21/73	1/31/74			30.4
11160	ALOC ENGINE EXPLORATORY TESTS COMP	209	4/ 2/74	11/ 5/74			30.4

PERT/TIME
MILESTONE REPORT

INTEGRATED ACQUISITION NETWORK
REPORTING ORGN. AFIT/LS
CONTRACT NO. 611
TERM IAN 3 YEAR 2LL
REPORT DATE= 1 /1./7)

LEVEL/SUMMARY ITEM 2/

RELEASE DATE,11/11/6)

EVENT No.	EVENT DESCRIPTION	MILESTONE CODE	EXPECTED DATE	LATEST ALLOWABLE DATE	SCHEDULED DATE	ACTUAL DATE	SLACK
11170	ABDC [illegible]	209	7/30/74	7/ 6/75			30.4
11180	RELEASE ENGINE #1	210	9/30/74	4/ 6/75			30.4
11190	MCT APPROVAL	211	11/ 1/74	6/10/75			30.4
11200	DEVC III	212	7/ 8/74	11/20/74			19.0
11210	AUTHORIZATION FOR INITIAL PRODUCTION	213	7/30/74	12/13/74			19.0
11215	DSA C III	214	2/12/76	6/24/76			19.0
11220	LONG LEAD ITEMS OPT 1 FUNDING POINT	215	11/ 1/74	1/20/75			19.0
11230	LONG LEAD ITEMS OPT 2 FUNDING POINT	216	7/31/75	12/16/75			19.0
11240	DESIGN [illegible]	217	8/27/75	1/1./7[illegible]			19.0
11250	PCA	218	10/30/75	3/30/76			20.8
11260	PCA	219	12/ 3/75	4/29/76			20.8
11270	FLYER PROGRAM START	220	6/ 2/76	7/ 8/76			18.8
11280	FLYER PROGRAM END (PHASE II)	221	2/16/77	3/ 1/77			1.8
11290	1ST PRODUCTION A/C DELIVERY	222	10/26/76	10/26/76			0.0
11300	OPT-ADDITIONAL UNIT IOC	223	10/17/77	10/17/77			0.0
11310	SATAF ACTIVATED	224	6/29/77	6/29/77			0.0
10640	COMPLETE WIND TUNNEL TESTS	255	5/21/73	1/10/74			33.4

APPENDIX H

INTEGRATED ACQUISITION NETWORK WITH AMENDED PROGRAMMING PHASE

This appendix is composed of two parts. The first part is the activity report. It displays all the requisite dates and time durations for each activity in the network, as calculated from the input data. The column heading format for this report is as follows:

PRED. EVENT - event which signals the start of the activity.

SUCC. EVENT - event which indicates the completion of an activity.

ACTIVITY DESCRIPTION - self-explanatory

PROB. - probability of meeting the scheduled date, or if no scheduled date is specified, of meeting the allowed date.

ACTIV. TIME - calculated expected elapsed time (t_e) when three time estimates are given, or the single time estimate given.

EXPECTED DATE - earliest expected date (T_E) for completion of the activity.

ALLOWABLE DATE - latest allowable date (T_L) for completion of the activity.

DATE COMP/SCHED - if the activity has been completed, the actual completion date (T_A) is shown preceded by the letter A. If a required completion date has been specified, that date (T_R) is shown preceded by the letter R.

SLACK - slack for the activity (T_L - T_E)

TIME REMAINING - time from the report date until expected completion date (T_E) of the activity.

ORG. - identification of the organization responsible for this activity.

The second part of this report is the milestone report. This report displays all the requisite dates and time durations for each event in the network, as calculated from the input data. The column heading format for this report is as follows:

EVENT NO. - event number

EVENT DESCRIPTION - self-explanatory

MILESTONE CODE - first 3 digits of the milestone report flag.

EXPECTED DATE - earliest expected date (T_E) for the completion of the successor event of an activity.

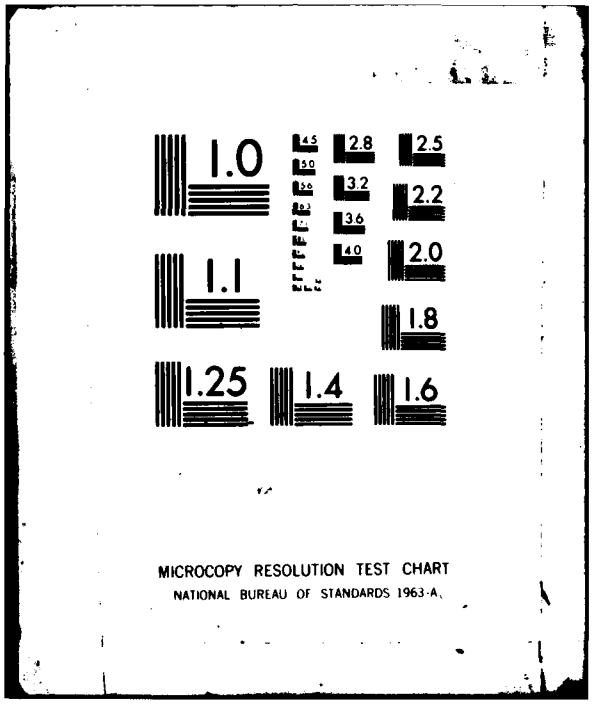
LATEST ALLOWABLE DATE - latest allowable date (T_L) for the completion of the event.

SCHEDULED DATE - scheduled or required date of completion of the event, preceded by an S or R respectively.

ACTUAL DATE - actual date of completion of the event (T_A).

SLACK - slack for the event ($T_L - T_E$).

AD-A109 777 AIR FORCE INST OF TECH WRIGHT-PATTERSON AFB OH SCHOOL--ETC F/G 5/1
A STUDY OF TIME CONSTRAINTS RELATED TO FACILITIES ACQUISITION I--ETC(U)
SEP 81 K P HANSEN
UNCLASSIFIED AFIT-LSSR-57-81 NL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5.6
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963-A

PERT/TIME
ACTIVITY REPORT

REPORTING ORGN. APIT/LS
CONTRACT NO. 011

INTEGRATED ACQUISITION NETWORK
1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

TERM- IAN 10 YEAR CAL
REPORT DATE- 10/31/69
RELEASE DATE-10/31/69

EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
300	355	CONSTRUCTION PROGRAM DETERMINATION	.91	4.5	10/ 6/73	8/14/73		-7.7	293.4	
355	1000	ABBREVIATED PB DEVELOPMENT	.81	17.4	2/12/74	12/10/73		-7.7	62.8	
355	3600	INITIAL ENVIRONMENTAL EVALUATION	.99	4.5	11/ 9/73	3/ 8/74		10.5	287.9	
400	600	INITIAL DOCUMENTATION DEVELOPMENT	.39	3.3	6/15/72	6/10/73		42.7	145.1	BASE
600	700	INITIAL DD FORM 1391 DEVELOPMENT	.39	8.9	8/21/72	6/25/73		42.7	140.8	BASE
700	800	1391 RECEIPT & REVIEW BY MAJCOM	.99	6.6	10/ 6/72	8/10/73		42.7	152.6	MAJCOM
800	900	PROGRAM AMENDMENT & FORWARD TO HQ USAF	.39	10.8	12/26/72	10/29/73		42.7	163.4	MAJCOM
800	1100	MAJCOM REVIEW OF 1391	.99	6.4	11/ 8/73	1/28/74		61.6	157.0	MAJCOM
900	1200	PROGRAM REVIEW BY HQ USAF	.39	13.8	4/ 2/73	2/ 6/74		-2.7	176.9	HQ USAF
1000	1100	ABBREVIATED PB MAILED TO MAJCOM	.89	8.9	2/19/74	1/28/74		-3.1	221.7	BASE
1000	1400	COMPLETE PB PREPARATION	.81	28.3	8/19/74	6/24/74		-7.7	247.1	
1100	1200	FORWARD ABBREVIATED PB TO HQ USAF	.89	1.0	2/26/74	2/ 4/74		-3.1	222.7	
1100	1500	MAJCOM REVIEW OF ABBREVIATED PB	.39	13.1	5/21/74	7/ 1/74		5.5	234.8	MAJCOM
1200	1300	APPROVED PROGRAM SELECTION BY HQ USAF	.85	3.2	3/21/74	2/26/74		-3.1	225.9	HQ USAF
1300	1600	POM ESTABLISHMENT BY HQ USAF	.12	22.2	6/23/74	8/ 1/74		-3.1	247.9	HQ USAF
1300	4300	DI ISSUE TO MAJCOM/AFRCE	.39	8.2	3/21/74	6/ 5/74		11.6	226.1	HQ USAF
1400	1500	COMPLETE PB MAILED TO MAJCOM	.81	8.9	8/23/74	7/ 1/74	R 7/ 1/74	-7.7	248.8	BASE
1500	1600	COMPLETE PB REVIEW & MAIL TO HQ USAF	.61	4.5	9/26/74	8/ 1/74	R 8/ 1/74	-7.7	252.5	MAJCOM
1600	1700	HQ USAF REVIEW OF PROGRAM	.81	9.3	11/25/74	10/ 1/74	R10/ 1/74	-7.7	260.8	HQ USAF
1700	1800	OSD & OMB REVIEW OF PROGRAM	.81	13.6	3/ 4/75	1/ 9/75		-7.7	274.4	JSD
1800	1900	PROGRAM SENT TO CONGRESS	.81	8.9	5/11/75	1/15/75	R 1/15/75	-7.7	275.3	CONGRESS
1900	2000	CONGRESSIONAL REVIEW & APPROVAL	.50	36.1	11/24/75	11/24/75		0.0	311.4	CONGRESS
2000	2100	BILLS SIGNED BY PRESIDENT	.50	1.6	11/26/75	11/26/75		0.0	312.8	PRESIDEN
2100	2200	OMB APPORTIONS FUNDS	.56	1.6	12/10/75	12/10/75		0.0	313.6	
2200	2210	HQ USAF APPORTIONS FUNDS TO AFRCE	.58	1.6	12/22/75	12/22/75		0.0	315.2	
2210	6200	FINANCIAL PLANNING	.58	2.0	1/ 7/76	1/ 7/76		0.0	317.2	
2300	2400	CMR PREPARATION	.50	1.6	1/29/76	2/ 9/76		1.4	320.4	AFRCE
2300	2500	BID ADVERTISEMENT,FORMULATION & RECEIPT	.50	5.0	2/23/76	2/23/76		0.0	323.8	
2400	2500	PREPARATION FOR AWARD	.50	2.0	2/12/76	2/23/76		1.4	322.4	
2500	2600	BIDS OPENED, REVIEWED & APPROVED	.50	1.0	3/ 1/76	3/ 1/76		0.0	324.8	AFRCE
2600	2800	PRECONSTRUCTION CONF PREPARATION	.50	1.6	3/11/76	3/11/76		0.0	326.4	AFRCE
2600	2900	FACILITY CONSTRUCTION	.50	78.8	9/19/77	9/19/77		0.0	404.4	
2900	3000	PRELIMINL INSPECTION	.50	1.0	9/26/77	9/26/77		0.0	405.4	AFRCE
3000	3100	CORRECT INSPECTION DEFICIENCIES	.50	2.0	10/17/77	10/17/77		0.0	407.2	
3100	3200	FINAL INSPECTION	.50	1.0	10/18/77	10/18/77		0.0	408.4	AFRCE
3200	3300	FACILITY TRANSFER	.50	3.9	10/25/77	10/25/77		0.0	409.3	AFRCE
3300	3400	EQUIPMENT INSTALLATION	.50	2.0	11/15/77	11/15/77		0.0	412.1	
3400	3500	FACILITY AND EQUIPMENT CHECKOUT	.50	3.2	12/ 8/77	12/ 8/77		0.0	415.3	
3500	11300	--DUMMY--	.50	0.0	12/ 8/77	12/ 8/77		0.0	415.3	
3000	3700	ENV ASSESSMENT & FONSI DETERMINATION	.99	6.0	12/14/73	4/11/74		10.9	212.7	BASE

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK REPORTING ORGN. AFIT/LS CONTRACT NO. BP1 TERM- IAN 18 YEAR CAL
1ST SORT KEY PREDECESSOR EVENT NO. REPORT DATE- 10/14/69
2ND SORT KEY SUCCESSOR EVENT NO. RELEASE DATE-10/14/69
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

	EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
	3700	3800	CA PRESENTATION TO BASE EPC	.99	1.2	12/17/73	4/12/74		16.5	212.9	BASE
	3800	4100	BASE BCE & DA REVIEW FONSI	.99	4.0	1/16/74	5/13/74		16.5	216.9	BASE
	4100	4200	FONSI PUBLISH & SOLICIT PUBLIC COMMENTS*	.99	5.0	2/25/74	6/17/74		16.5	221.9	BASE
	4200	1400	COMPLETE PROGRAMMING DOCUMENTS	.99	1.0	2/27/74	6/24/74		16.5	222.9	BASE
	4300	4310	MAJCOM/AFRCE NOTIFY DESIGN AGENT	.99	1.1	3/26/74	6/12/74		18.6	227.2	AFRCE
	4310	4400	DA PREPARATION FOR PREDESIGN CONF	.99	1.6	4/ 9/74	6/26/74		18.6	228.8	COE
	4400	4500	MAJCOM/AFRCE COLLECTS & REVIEWS COMMTS	.99	4.1	5/ 8/74	8/ 1/74		11.9	232.9	AFRCE
	4400	4600	CONCEPTUAL DESIGN	.99	5.3	5/23/74	8/ 8/74		15.6	235.1	COE
	4500	4600	RELAY COMMENTS TO DA	.99	2.2	5/14/74	8/ 5/74		11.3	233.8	AFRCE
	4600	4800	EARLY PRELIMINARY DESIGN	.99	12.0	7/19/74	11/ 1/74		18.6	247.1	COE
	4600	4900	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	9/17/74	12/ 3/74		18.6	251.2	AFRCE
	4800	5000	PRELIMINARY DESIGN	.99	4.1	9/17/74	12/10/74		11.5	251.2	COE
	4900	5000	RELAY COMMENTS TO DA	.99	0.9	9/24/74	12/10/74		18.6	252.1	AFRCE
	4900	5100	PREP FOR EARLY PRELIM DESIGN CONF	.99	2.1	10/ 2/74	1/ 2/75		12.4	253.3	AFRCE
	5000	5100	EARLY PRELIM DESIGN CONTINUES	.99	3.8	10/15/74	1/ 2/75		18.6	255.1	COE
	5100	5200	35% DESIGN NOTIFICATION TO MAJCOM	.99	0.2	10/16/74	1/ 3/75		18.6	295.3	COE
	5100	5400	EARLY PRELIM DESIGN CONF COMMENTS	.99	8.6	12/17/74	4/ 1/75		14.7	263.7	COE
	5200	5300	35% DESIGN NOTIFICATION TO HQ USAF	.99	1.2	10/17/74	1/ 6/75		14.8	255.5	AFRCE
	5300	1800	35% DESIGN NOTIFICATION TO OSD	.99	0.6	10/22/74	1/ 9/75		18.6	256.1	HQ USAF
	5400	5500	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	1/16/75	5/21/75		17.7	267.8	AFRCE
	5400	5600	FINAL DESIGN	.99	0.6	2/13/75	5/27/75		14.7	271.7	COE
	5500	5600	RELAY COMMENTS TO DA	.99	0.9	1/23/75	5/27/75		17.7	268.7	AFRCE
	5500	5700	PREP FOR PRELIM DESIGN CONFERENCE	.99	2.1	1/31/75	6/10/75		19.5	269.9	AFRCE
	5600	5700	PRELIM DESIGN CONTINUES	.99	3.8	2/ 6/75	6/10/75		14.7	274.7	COE
	5700	5800	PRELIM DESIGN CONF COMMENTS INCORP	.99	9.6	4/13/75	8/26/75		14.7	284.3	COE
	5800	5900	MAJCOM/AFRCE COLLECT & REVIEW COMMENTS	.99	4.1	6/11/75	9/25/75		14.7	288.4	AFRCE
	5800	6300	FINAL DESIGN DETAILS	.99	4.5	6/13/75	10/ 1/75		15.2	288.8	COE
	5900	2210	95% DESIGN NOTIFICATION TO HQ USAF	.99	1.0	6/18/75	12/22/75		25.8	289.4	AFRCE
	5900	5800	PREP FOR FINAL DESIGN CONFERENCE	.99	2.1	6/26/75	10/16/75		15.6	290.5	AFRCE
	5900	6300	RELAY COMMENTS TO DA	.99	0.9	6/18/75	10/ 1/75		14.7	289.3	AFRCE
	6000	6400	FINAL DESIGN COMMENTS INCORPORATED	.99	4.5	8/ 8/75	11/18/75		14.7	295.9	COE
	6100	6200	CONTRACT PREPARATION	.99	3.2	9/22/75	1/ 7/76		14.7	302.5	AFRCE
	6200	2300	IFB PREPARATION	.99	1.6	1/19/76	1/19/76		0.1	318.8	
	6300	6000	FINAL DESIGN CONTINUES	.99	2.1	7/ 2/75	10/[illegible]		14.7	291.4	COE
	6400	6100	FINAL DESIGN REVIEW BY MAJCOM/AFRCE	.99	3.4	8/28/75	12/12/75		14.7	299.3	AFRCE
CALCULATED TL			IS BEFORE START OF 1 YR CALANDAR								
	10000	10180	DUMMY NETWORK START		0.0			A10/10/69	-7.7	0.0	
I	10140	10190	PREPARE REVISED DRAFT DCP		0.6	12/12/69	10/17/69		-7.7	0.6	
I	10180	10260	CONTINUE BASELINE PREPARATION & ANALYSIS		26.4	4/26/70	3/ 4/70		-6.7	26.4	
	10190	10200	PREPARE FOR OSARC REVIEW OF STRATEGY		0.8	12/10/69	10/23/69		-7.7	0.4	
	10190	10210	FINAL DCP PREPARATION		13.0	3/17/70	1/26/70		-7.3	21.6	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 601 — TERM- JAN 18 YEAR CAL
1ST SORT KEY PREDECESSOR EVENT NO. — REPORT DATE- 10/14/69
2ND SORT KEY SUCCESSOR EVENT NO. — RELEASE DATE-10/18/69
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
10200	10220	PARTICIPATION OF RECOM BY DECISION AUTH		15.6	4/ 9/70	2/16/70		-7.7	25.8	
10210	10220	FINAL RFP APPROVAL		3.8	4/ 7/70	2/16/70		-7.3	24.6	
10220	10230	RFP PUBLICATION		6.8	4/15/70	2/20/70		-7.7	25.8	
10230	10240	PROGRAM CONTROL FORMALIZATION		1.6	4/27/70	3/ 4/70		-7.7	27.4	
10240	10250	FINALIZE RFP		1.8	5/ 8/70	3/17/70		-7.7	29.2	
10240	10280	GUN RFP PREPARATION		15.6	8/20/70	1/26/71		21.3	44.8	
10240	10370	BASELINE DATA PREP & PLANNING		139.2	7/14/72	6/13/72		-6.5	140.8	
10250	10260	INDUSTRY PREPARES REPLY TO RFP		13.6	7/12/70	6/24/70		-7.7	42.8	
10260	10270	INDUSTRY REPLY EVALUATION		9.8	8/22/70	8/27/70		-7.7	52.6	
10270	10290	FINAL SOURCE SELECTION EVALUATION (P)		7.2	12/15/70	10/21/70		-7.7	59.8	
10280	10330	INDUSTRY REPLY FORMULATION & EVALUATION		35.6	4/30/71	9/20/71		21.3	79.8	
10290	10300	BOARD I REVIEW & SELECTION		6.2	12/16/70	11/21/70		-7.7	66.0	
10300	10310	FINAL CONTRACT PREPARATION		9.8	12/22/70	10/27/70		-7.7	69.8	
10300	10340	A-ENGINE CONTRACT DEVELOPMENT		30.6	1/10/72	11/26/71		-6.3	114.4	
10310	10320	PROTOTYPE ENGINEERING		9.2	2/26/71	1/ 8/71		-7.1	78.8	
10310	10340	A-9 ENGINE CONTRACT NEGOTIATIONS		33.8	1/19/72	11/26/71		-7.7	115.8	
10320	10350	PROTOTYPE FABRICATION & MANUFACTURE A-10		62.4	5/15/72	3/27/72		-7.1	132.4	
10320	10360	PROTOTYPE FABRICATION & MANUFACTURE A-30		65.2	6/ 5/72	4/10/72		-6.7	135.2	
10330	10440	GUN PROTOTYPE FABRICATION & MANUFACTURE		36.2	12/22/72	9/26/73		21.3	163.2	
10340	10380	A-5 ENGINE FABRICATION & TEST		20.4	6/12/72	4/10/72		-7.7	136.2	
10350	10390	A-1 PROTOTYPE FLIGHT EVALUATION		21.2	11/16/72	8/24/72		-7.1	153.6	
10360	10380	A-9 PROTOTYPE FLIGHT EVALUATION		18.8	10/19/72	8/24/72		-7.7	154.2	
10370	400	NOTIFY BASE OF INTENT TO REDOWN SYSTEM		1.0	7/21/72	9/26/73		42.7	141.8	
10370	10420	BASIC CONTRACT DEVELOPMENT & PLANNING		29.8	2/ 9/73	1/11/73		-4.5	169.8	
10380	10390	AIR FORCE COMPETITIVE FLYOFF		6.6	12/ 7/72	10/13/72		-7.7	161.8	
10390	10400	FLYOFF RESULTS EVALUATION		9.8	1/19/73	11/24/72		-7.7	166.8	
10400	10410	REVIEW & RATIFICATION BY SSA		8.2	1/22/73	11/27/72		-7.7	167.8	
10410	10420	FSD CONTRACT PREPARATION & NEGOTIATION		6.8	3/ 5/73	1/11/73		-7.7	173.8	
10410	10430	ENGINES CONTRACT PREP & NEGOTIATION		5.6	3/ 5/73	11/29/73		37.9	173.8	
10420	300	FACILITY REQUIREMENTS REPORT GENERATION	.31	25.9	9/ 6/73	7/12/73		-7.7	198.9	
10420	10430	PREPRODUCTION DESIGN MODIFICATIONS		9.6	5/16/73	7/31/73		11.1	182.6	
10420	10440	TOOL PLANNING DESIGN & MANUFACTURE		18.4	7/13/73	9/ 6/73		7.1	191.4	
10420	10640	WIND TUNNEL DRAG TESTS		11.8	5/21/73	3/11/74		48.5	184.8	
10420	10670	CONDUCT STATIC ARTICLE TESTS		118.2	7/ 1/75	4/23/77		52.1	291.2	
10420	10680	FATIGUE ARTICLE TEST PLANNING		28.2	9/ 7/73	6/21/74		39.7	199.2	
10420	10725	EGRESS TEST DESIGN MODIFICATIONS		6.8	4/16/73	2/26/74		33.7	179.8	
10420	10750	MISC TEST PLANNING		2.8	3/19/73	3/ 8/74		49.3	175.8	
10420	10770	PREPARE VENDOR SPECS		1.2	3/13/73	6/ 4/73		11.5	174.2	
10420	10840	DETERMINE BASELINE DESIGN LOADS		9.2	5/ 8/73	7/11/73		11.5	182.2	
10420	10870	GUN LOCATION DETERMINATION		10.4	7/13/73	10/ 5/73		11.7	191.4	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK
REPORTING ORGN. AFIT/LS
CONTRACT NO. 671
TERM- JAN 1u YEAR CAL
REPORT DATE- 10/10/69
RELEASE DATE-10/1./69

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TF)

EVENT PRED.	SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
10420	10890	PREPARE AVIONICS ORDERS		20.4	7/27/73	12/23/73		11.9	198.4	
10420	10810	INITIAL DOCK VERIFICATION		56.8	3/27/74	10/ 1/74		26.1	227.8	
10420	10880	CONTRACT NEGOTIATING & PLANNING		45.2	12/10/73	3/11/74		11.3	213.2	
10420	10850	SPECIFICATION UPDATING		9.6	5/ 7/73	1/29/75		67.5	192.6	
10420	11810	PREPARE TESTING PLANS		4.6	4/ 5/73	12/11/74		67.9	177.6	
10430	11140	PRELIM MODIFICATION TO ENGINE DESIGN		4.6	4/ 5/73	1/ 3/74		37.5	177.6	
10440	10450	GUN COMPETITIVE FLYOFF		13.8	4/ 2/73	8/31/73		21.3	177.8	
10460	10460	GUN COMPETITIVE FLYOFF EVAL & SELECTION		8.8	5/ 4/73	11/ 5/73		21.3	185.8	
10460	10470	FINAL CONTRACT PREP & NEGOTIATION		1.2	6/11/73	11/12/73		21.3	196.8	
10470	11100	PRELIM MODIFICATION TO GUN DESIGN		8.2	5/ 8/73	1/11/74		21.3	195.8	
10480	10490	FINAL IFF MAJOR COMPONENT DESIGN		4.6	6/13/73	8/31/73		11.1	187.2	
10480	10880	FINAL IFF DESIGN		4.6	7/17/73	10/ 4/73		11.1	191.8	
10490	10810	MANUFACTURE AND DELIVER FORGINGS		17.6	1 /10/73	2/14/74		16.3	244.8	
10500	6000	--DUMMY--		0.0	7/17/73	11/16/73		114.3	191.8	
10500	10520	PREPARE STRUCTURAL DRAWINGS		38.4	2/21/74	5/10/74		11.1	222.2	
10510	10570	ASSEMBLE MAJOR COMPONENTS		4.8	11/15/73	3/14/74		16.3	278.8	
10520	10530	PREPARE FINAL ASSEMBLY PLANS & JIGS		22.2	7/30/74	10/17/74		11.1	244.4	
10530	10580	FINAL ASSEMBLY A/C #1		4.4	9/27/74	11/19/74		7.1	252.8	
10540	10550	TOOL RELEASE & SET-UP		4.4	8/14/73	10/ 4/73		7.1	195.8	
10550	10560	DEVELOP MANUFACTURING DETAILS		4.4	9/14/73	11/ 6/73		7.1	209.2	
10560	10570	MANUFACTURE COMPONENTS		17.8	1/23/74	3/14/74		7.1	216.8	
10570	10530	ASSEMBLE SUBSTRUCTURE		38.4	8/27/74	10/17/74		7.1	248.4	
10580	10590	GROUND TESTING		9.8	12/ 2/74	1/23/75		7.1	261.6	
10590	10600	PREPARATION FOR FIRST FLIGHT		2.8	12/16/74	2/ 6/75		7.1	263.6	
10600	10610	PREPRODUCTION AIRCRAFT CONSTRUCTION		42.6	1./16/75	12/ 9/75		7.1	386.2	
10600	10620	INITIAL AIRCRAFT TESTING & DELIVERY		8.2	2/13/75	4/17/75		8.9	271.8	
10610	10630	DELIVERY & TEST OF LAST PREPROD A/C		57.2	2/ 9/77	4/20/77		9.9	373.4	
10610	11290	MANUFACTURE PRODUCTION A/C # 1		1.6	1./20/75	12/19/75		7.1	387.8	
10620	10630	CUT OF PREPRODUCTION AIRCRAFT		182.6	2/16/77	4/20/77		8.9	374.4	
10630	11280	--DUMMY--		0.0	2/16/77	4/20/77		8.9	374.4	
10640	10650	STORE SEPARATION TESTS		22.2	1./29/73	8/15/74		48.5	246.2	
10640	10660	FLUTTER TESTS		24.0	4/10/74	2/ 6/75		46.5	231.2	
10640	10680	--DUMMY--		0.0	4/10/74	2/ 6/75		46.5	231.2	
10670	10630	--DUMMY--		0.0	7/ 1/75	4/20/77		92.1	291.2	
10680	10690	FATIGUE ARTICLE FABRICATION & ASSEMBLY		53.2	11/21/74	9/ 4/75		39.7	260.4	
10690	10700	FATIGUE TESTING		34.8	7/30/75	9/11/76		39.7	295.2	
10700	10710	FATIGUE TESTING CONTINUES		22.2	1/ 8/76	10/15/76		39.7	317.4	
10710	10720	FATIGUE TESTING CONTINUES		26.2	7/ 8/76	4/21/77		39.7	343.6	
10720	10630	--DUMMY--		0.0	7/ 8/76	4/20/77		39.7	343.6	
10720	10730	EGRESS STRUCTURAL TESTS		28.2	10/22/73	8/30/74		43.7	289.2	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK REPORTING ORGN. AFIT/LS CONTRACT NO. 0'1 TERM- JAN 10 YEAR CAL
1ST SORT KEY PREDECESSOR EVENT NO. REPORT DATE- 10/1./69
2ND SORT KEY SUCCESSOR EVENT NO. RELEASE DATE-12/1./69
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (YR)

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	ACTIV. PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
10730	10740	FREEST TRACK TESTS		21.8	3/27/74	2/ 6/75		43.7	227.8	
10740	10900	--DUMMY--		0.0	3/27/74	2/ 6/75		43.7	227.8	
10750	10760	CONDUCT MISC TESTS		159.8	5/ 6/76	4/23/77		49.3	334.8	
10760	10630	--DUMMY--		0.0	5/ 6/76	4/28/77		-9.3	334.8	
10770	10780	--DUMMY--		0.0	3/13/73	8/ 6/73		11.5	174.2	
10770	10790	VENDOR REPLY & EVALUATION		5.0	4/26/73	7/17/73		11.5	181.2	
10780	10800	PREPARE VENDOR CONTRACT		7.0	5/ 1/73	7/24/73		11.5	181.2	
10790	10800	FINAL CONTRACT NEGOTIATIONS		1.0	5/ 1/73	7/24/73		11.5	181.2	
10790	10810	PREPARE INSTALLATION DRAWINGS		46.4	5/21/74	12/17/73		26.7	234.8	
10800	10830	MANUFACTURE & TEST COMPONENTS		58.2	6/26/74	9/16/74		11.5	239.4	
10800	10830	--DUMMY--		0.0	5/21/74	12/17/74		20.7	234.8	
10810	10820	MANUFACTURE & TEST COMPONENTS		11.2	8/ 9/74	4/23/77		137.3	246.8	
10820	10830	--DUMMY--		0.0	6/ 9/74	4/23/77		137.3	246.8	
10830	10500	INSTALL COMPONENTS		9.0	8/27/74	11/19/74		11.5	248.4	
10840	10850	--DUMMY--		0.0	1/ 8/73	7/31/73		11.5	182.2	
10840	10850	DETERMINE FINAL DESIGN LOADS		38.2	1/16/74	5/10/74		15.9	217.4	
10850	10520	--DUMMY--		0.0	1/16/74	5/10/74		15.9	217.4	
10850	10860	VIBRATION & ACOUSTIC ANALYSIS		34.8	9/24/74	4/23/77		131.1	252.2	
10860	10530	--DUMMY--		0.0	9/24/74	4/23/77		131.1	252.2	
10870	10880	PREPARE GUN INSTALLATION DRAWING		43.4	5/21/74	8/14/74		11.7	234.8	
10880	10890	GUN GROUNDCHECKS		22.2	1 /26/74	1/23/75		11.7	257.9	
10890	10900	AVIONICS INTEGRATION & TESTING		65.2	11/ 7/74	2/ 6/75		12.1	254.6	
10890	11080	NEGOTIATE ORDER		2.2	8/13/73	11/ 7/73		11.9	195.6	
10900	10600	--DUMMY--		0.0	11/ 7/74	2/ 6/75		12.1	258.6	
10910	11200	REVIEW PRELIM FSD DATA		14.2	7/ 8/74	1/14/75		26.1	241.2	
10910	11220	PREPARE LONG LEAD ORDER #1		30.6	11/ 1/74	5/ 9/75		26.1	257.8	
10920	10930	CONTRACT MONITORING & PLANNING		13.8	3/21/74	6/11/74		11.3	226.2	
10930	10940	CONTRACT MONITORING & PLANNING		9.6	4/23/74	7/15/74		11.3	230.8	
10940	10950	CONTRACT MONITORING & PLANNING		26.2	11/14/74	1/ 7/75		11.3	255.4	
10950	10600	CONTRACT MONITORING & PLANNING		4.4	11/14/74	2/ 6/75		11.3	259.4	
10960	10970	DETERMINE GUN INTERFERENCE DATA		11.8	7/25/73	4/16/75		87.5	193.8	
10970	10980	ARMOR ANALYSIS		26.2	12/10/73	9/ 9/75		87.5	213.2	
10980	10990	VULNERABLE AREA ANALYSIS		32.2	12/10/74	9/10/75		87.5	269.4	
10990	11000	DETERMINE FINAL GUN INTERFERENCE DATA		30.4	8/ 4/75	4/23/77		87.5	295.8	
11000	10630	--DUMMY--		0.0	8/ 4/75	4/23/77		87.5	295.8	
11010	11020	PRELIM DESIGN OF FORMAL MAINT TRAIN SYS		13.8	7/ 9/73	4/ 2/75		87.9	190.6	
11020	11030	FINAL MTS DESIGN		22.8	12/13/73	9/ 8/75		87.9	212.6	
11030	11040	FINALIZE MTS DESIGN DETAILS		17.8	4/15/74	1/ 9/76		87.9	229.6	
11040	11050	MTS PLANNING & DESIGN REVIEW		11.8	7/ 2/74	3/26/76		87.9	248.6	
11050	11060	MTS CONSTRUCTION		50.2	6/27/75	3/10/77		87.9	296.8	

PERT/TIME
ACTIVITY REPORT

INTEGRATED ACQUISITION NETWORK — REPORTING ORGN. AFIT/LS — CONTRACT NO. 001

TERM- IAN 18 YEAR CAL
REPORT DATE- 10/16/69
RELEASE DATE-10/16/69

1ST SORT KEY PREDECESSOR EVENT NO.
2ND SORT KEY SUCCESSOR EVENT NO.
3RD SORT KEY LEAST SLACK
4TH SORT KEY EXPECTED DATE (TE)

EVENT PRED.	EVENT SUCC.	ACTIVITY DESCRIPTION	PROB.	ACTIV. TIME	DATE EXPECTED	DATE ALLOWED	DATE COMP/SCHED	SLACK	REMAINING TIME	ORG.
11060	11070	MTS FINAL DETAILING & DELIVERY		4.6	7/31/75	4/28/77		87.9	295.4	
11070	10630	--DUMMY--		1.0	7/31/75	4/29/77		87.9	295.4	
11080	11090	MANUFACTURE & DELIVER AVIONICS		59.2	5/21/76	8/13/76		11.9	234.8	
11090	10580	INSTALL AVIONICS		13.2	8/23/76	11/19/76		11.9	248.8	
11100	11110	PREPRODUCTION GUN FABRICATION		19.6	11/29/73	9/ 1/76		21.3	214.6	
11110	11120	FINALIZE GUN DESIGN		41.8	9/25/74	2/27/75		21.3	252.4	
11120	11130	TEST & QUALIFY GUN		21.6	2/28/75	7/31/75		21.3	274.8	
11130	10630	--DUMMY--		0.0	2/28/75	4/29/77		1.9.3	274.8	
11130	12080	CONTINUING GUN PRODUCION & DELIVERY		120.6	7/ 6/77	12/ 8/77		21.3	394.8	
11140	11150	FINALIZE ENGINE DESIGN		11.2	6/25/73	3/22/74		37.5	186.8	
11150	11160	PRELIM ENGINE TESTING		39.6	4/ 2/74	12/31/74		37.5	227.6	
11160	11170	ENGINE QUALIFICATION TESTING		15.6	7/30/74	4/29/75		37.5	240.4	
11170	11180	PREPRODUCTION ENGINE FABRICATION		4.6	8/30/74	5/28/75		37.5	249.8	
11170	11190	ENGINE QUALIFICATION TESTING		12.8	11/23/74	7/31/75		38.9	256.4	
11180	11190	PREPRODUCTION ENGINE TESTING		6.8	11/ 1/74	7/31/75		37.5	257.6	
11190	10630	--DUMMY--		0.0	11/ 1/74	4/28/77		128.5	257.8	
11190	12080	CONTINUING ENGINE PRODUCTION & DELIVERY		120.8	3/11/77	12/ 8/77		37.5	377.8	
11200	11210	RATIFICATION OF DSARC RECOMMENDATIONS		3.2	/26/74	2/ 5/75		26.1	244.4	
11210	11220	AUTHORIZE LONG LEAD ORDER		13.4	11/ 1/74	5/ 9/75		26.1	257.6	
11215	11270	RATIFICATION OF DSARC RECOMMENDATIONS		2.8	2/26/76	8/27/76		26.1	324.4	
11220	11230	PREPARE LONG LEAD ORDER #2		37.6	/31/75	2/ 6/76		26.1	295.4	
11220	11290	--DUMMY--		0.0	11/ 1/74	12/19/75		57.1	257.8	
11230	11240	PRICE/A4 COST VERIFICATION		3.8	8/27/75	3/ 4/76		26.1	299.2	
11240	11215	REVIEW OF PED DATA		23.2	2/12/76	8/13/76		26.1	322.4	
11240	11250	REVIEW OF TEST DATA		9.8	1/26/75	5/19/76		27.9	308.2	
11250	11260	REVIEW OF PED DATA		4.4	12/ 3/75	6/18/76		27.9	312.6	
11260	11215	PREPARATION FOR DSARC REVIEW		8.8	1/30/76	8/13/76		27.9	329.6	
11270	11280	FOTGE		32.8	11/23/76	4/29/77		26.9	362.4	
11280	11300	INITIAL OPERATIONAL CADRE TRAINING & OJT		32.8	1/ 3/77	12/ 8/77		8.9	4.6.4	
11290	11270	ICTGE		21.8	4/ 2/76	8/27/76		26.9	329.6	
11290	11310	EQUIP TEST & TRAINING UNITS		77.6	4/29/77	8/21/77		7.1	384.8	
11290	12080	CONTINUING AIRCRAFT PRODUCTION		86.8	/6/77	12/ 8/77		21.5	393.8	
11300	12080	--DUMMY--	.80	0.0	12/ 8/77	12/ 8/77		0.0	415.3	
11310	2000	SATISFACTION TO MEET IOC (PRECEDENCE)		0.0	4/29/77	10/19/77		19.6	384.8	
11300	11300	FINAL PREPARATION & COORDINATION		23.4	1/17/77	12/ 8/77		7.1	408.2	

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300	FACILITY SURVEY COMPLETE	3	9/ 5/73	7/12/73			-7.7
400	BASE PB APPROVES FACILITY CONSTR	4	7/31/72	7/24/73			42.7
600	FULL +ECEIVED FROM MAJCOM	7	8/15/72	8/10/73			42.7
800	INITIAL OD F3?4 1391 RECEIVED BY MAJCOM	8	10/ 6/72	8/10/73			42.7
900	INITIAL PROGRAM RECEIVED BY HQ USAF	9	12/26/72	1[illegible]/29/73			42.7
1000	ABBREVIATED PROJECT BOOK COMPLETED	10	2/12/74	12/10/73			-7.7
1100	ABBREVIATED PB RECEIVED BY MAJCOM	11	2/19/74	1/28/74			-3.1
1400	FULL PB REVIEW COMPLETE	12	6/19/74	6/24/74			-7.7
1200	ABBREVIATED PB RECEIVED BY HQ USAF	13	2/26/74	2/ 4/74			-3.1
1300	DI ISSUED BY HQ USAF	14	3/20/74	2/26/74			-3.1
1500	FULL PB SUBMITTED TO MAJCOM	15	8/23/74	7/ 1/74	R 7/ 1/74		-7.7
1600	FULL PB SUBMITTED TO HQ USAF	16	9/26/74	8/ 1/74	R 8/ 1/74		-7.7
1700	MCP PROGRAM SUBMITTED TO OSD	17	11/25/74	1[illegible]/ 1/74	R10/ 1/74		-7.7
1800	OSD/OMB REVIEW COMPLETE	18	3/ 4/75	1/ 9/75			-7.7
1900	MCP PROGRAM SUBMITTED TO CONGRESS	19	3/11/75	1/15/75	R 1/15/75		-7.7
2000	CONGRESS PASSED MCP BILL	20	11/24/75	11/24/75			0.0
2100	PRESIDENT SIGNS MCP BILLS	21	11/28/75	11/28/75			0.0
2200	FUNDS APPORTIONED BY OMB	22	12/1[illegible]/75	12/10/75			0.0
2210	FUNDS APPORTIONED BY HQ USAF	24	12/22/75	12/22/75			0.0
2300	IRB READY	23	1/19/76	1/19/76			0.0
2400	CWE PREPARED	26	1/29/76	2/ 9/76			1.4
2500	CONSTRUCTION BIDS PREPARED	27	2/23/76	2/23/76			0.0
2600	CONTRACT AWARDED	28	3/ 1/76	3/ 1/76			0.0
2800	PRECONSTRUCTION CONFERENCE COMPLETE	29	3/11/76	3/11/76			0.0
2900	FACILITY CONSTRUCTED	36	9/19/77	9/19/77			0.0
3000	FINAL INSPECTION COMPLETE	31	9/26/77	9/26/77			0.0
3100	DEFICIENCIES CORRECTED	32	10/17/77	1[illegible]/17/77			0.0
3200	FINAL INSPECTION COMPLETE	33	10/18/77	10/18/77			0.0
3300	FACILITY TRANSFER COMPLETE	34	10/25/77	1[illegible]/25/77			0.0
3400	EQUIPMENT INSTALLATION COMPLETE	35	11/15/77	11/15/77			0.0
3500	FACILITY READY FOR USE	30	12/ 8/77	12/ 8/77			0.0
3600	CATEX INAPPLICABILITY CONFIRMED	37	11/ 9/73	3/ 8/74			16.5
3700	ENVIRONMENTAL ASSESSMENT COMPLETE	38	12/14/73	[illegible]/11/74			16.5
3800	BASE EPC APPROVED EA	39	12/17/73	[illegible]/12/74			16.5
4100	FONSI REVIEW COMPLETE	42	1/16/74	9/10/74			16.5
4200	PUBLIC COMMENT PERIOD COMPLETE	43	2/20/74	6/17/74			16.5
4300	DI ISSUED TO MAJCOM/AFRCE	44	3/21/74	6/ 9/74			10.6
4310	EA NOTIFIED OF DI	45	3/28/74	6/12/74			10.6
4400	PREDESIGN CONFERENCE COMPLETE	46	6/ 9/74	6/26/74			10.6
4500	COMMENTS ON PREDESIGN COLLECTED	47	7/ 8/74	8/ 1/74			11.9

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4600	DA RECEIVED COMMENTS	48	9/23/74	8/ 8/74			10.6
4800	EARLY PRELIM DESIGN REVIEW COMPLETE	49	8/19/74	11/ 1/74			10.6
4900	PRELIM DESIGN COMMENTS COLLECTED	5/	9/17/74	12/ 3/74			10.6
5000	DA RECEIVED COMMENTS	51	9/24/74	12/10/74			10.6
5100	EARLY PRELIM DESIGN CONF COMPLETE	52	10/15/74	1/ 2/75			10.6
5200	3RD DESIGN REPORT SUBMITTED TO AFRGE	53	10/16/74	1/ 3/75			10.6
5300	3RD DESIGN REPORT SUBMITTED TO HQ USAF	54	11/17/74	1/ 6/75			10.6
5400	PRELIM DESIGN REVIEW COMPLETE	55	12/17/74	4/ 1/75			14.7
5500	COMMENTS COLLECTED	56	1/16/75	5/21/75			17.7
5600	DA RECEIVED COMMENTS	57	2/13/75	5/27/75			14.7
5700	PRELIM DESIGN CONF COMPLETE	58	3/ 6/75	6/10/75			14.7
5800	FINAL DESIGN REVIEW COMPLETE	59	5/13/75	8/26/75			14.7
5900	COMMENTS COLLECTED	6/	6/11/75	9/25/75			14.7
6000	FINAL DESIGN CONFERENCE COMPLETE	61	7/ 2/75	10/16/75			14.7
6100	FINAL DESIGN APPROVED	62	8/26/75	12/12/75			14.7
6200	NAVDEM/AFRGE CONTRACT REVIEW COMPLT	63	1/ 7/76	1/ 7/76			0.0
6300	DA RECEIVES COMMENTS	64	8/18/75	11/ 1/75			14.7
6400	DESIGN COMPLETE	69	8/ 5/75	11/18/75			14.7
700	INITIAL 1391 COMPLETED	6.	8/21/72	6/29/73			42.7
	CALCULATED TL BEFORE START OF 10YR CALANDAR						
10180	SSA RECIPIENTS TO COMPETITIVE PROTO STRAT	109				10/10/69	-7.7
10190	REVISED DRAFT OCP PREPARED	11/	12/12/69	1/17/69			-7.7
10200	DSARC REVIEW COMPLETE	11.	12/18/69	1/23/69			-7.7
10210	FINAL OCP 238 COMPLETED	112	3/17/70	1/26/70			-7.3
10220	OCP 238 APPROVED BY DEPUTY SECDEF	113	6/ 9/70	2/16/70			-7.7
10230	PPD ISSUED	114	4/15/70	2/20/70			-7.7
10240	A-X SPO FULLY ESTABLISHED	115	4/27/70	3/ 4/70			-7.7
10250	RFP ISSUED TO INDUSTRY	116	5/ 8/70	3/17/70			-7.7
10260	RESPONSE TO RFP RECEIVED	117	8/12/70	6/19/70			-7.7
10270	SSAC RECOMMENDATIONS BRIEFEDED TO SSA	118	10/22/70	6/27/70			-7.7
10280	RFP FOR GUN ISSUED TO INDUSTRY	119	8/26/70	1/26/71			21.3
10290	DSARC I	12/	12/[illegible]/70	1/[illegible]/70			-7.7
10300	CONTRACTORS SELECTED FOR CON PROTOTYPE	121	12/16/70	1/21/70			-7.7
10310	AUTHORIZATION TO AWARD CONTRACT	122	12/22/70	1/27/70			-7.7
10320	PROTOTYPES DESIGNATED A-9 & A-10	123	2/26/71	1/ 8/71			-7.1
10330	GUN PROTOTYPING CONTRACTORS SELECTED	124	6/30/71	9/29/71			21.3
10340	A-9 ENGINE CONTRACT NEGOTIATED	125	1/19/72	11/26/71			-7.7
10350	A-10 FIRST FLIGHT	126	5/15/72	3/27/72			-7.1
10360	A-9 FIRST FLIGHT	127	6/12/72	4/10/72			-7.7

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10370	PROPOSAL INSTRUCTIONS FOR FSD RELEASED	128	7/14/72	6/13/72			-4.5
10380	START AIR FORCE FLYOFF	129	10/10/72	8/24/72			-7.7
10390	FLYOFF COMPLETED	130	12/ 7/72	1 /13/72			-7.7
10400	DSARC II	131	1/19/73	11/24/72			-7.7
10410	A-1[illegible] SELECTED FOR FSD	132	1/22/73	11/27/72			-7.7
10420	CONTRACT AWARD TO PRC FOR FSD	133	3/ 5/73	1/17/73			-7.7
10430	ENGINE CONTRACT AWARD TO GE	134	3/ 8/73	11/29/73			37.5
10440	GUN COMPETITIVE SHOOTOFF BEGINS	135	12/[illegible]	[illegible]			21.3
10450	GUN COMPETITIVE SHOOTOFF ENDS	136	6/ 2/73	8/31/73			21.3
10460	GE SELECTED FOR GUN FSD	137	6/ 4/73	11/ 5/73			21.3
10470	CONTRACT AWARD TO GE FOR GUN	138	6/11/73	11/12/73			21.3
10480	DESIGN LAYOUTS COMPLETE	139	5/17/73	7/31/73			11.1
10490	MAJOR FORGING RELEASE	140	6/13/73	8/31/73			11.1
10500	DESIGN FREEZE	141	7/17/73	1 / 4/73			11.1
10510	RECEIVE FORGINGS	142	10/10/73	2/14/74			16.3
10520	RELEASE STRUCTURAL DRAWINGS	143	2/21/74	5/10/74			11.1
10530	STRUCTURAL ASSEMBLY MANUFACTURE	144	8/27/74	11/17/74			7.1
10540	TOOL PLANNING, DESIGN & MANUFACTURE COMP	145	7/13/73	9/ 4/73			7.1
10550	RELEASE TOOLS	146	8/14/73	1 / 4/73			7.1
10560	MANUFACTURING DETAILS COMLETE	147	9/14/73	11/ 6/73			7.1
10570	STRUCTURAL ASSEMBLY COMP	148	1/23/74	3/14/74			7.1
10580	FINAL ASSEMBLY A/C #1 COMPLETE	149	9/27/74	11/19/74			7.1
10590	GROUND TEST COMPLETE	150	12/ 2/74	1/23/75			7.1
10600	FIRST FLIGHT A/C #1 (PREPROD)	151	12/16/74	2/ 6/75			7.1
10610	DELIV-R A/C #10 (PREPROD)	152	12/16/73	12/ 9/75			7.1
10620	START DT&E TESTING	153	2/13/75	4/17/75			8.9
10630	COMPLETE DT&E TESTING	154	2/16/77	4/20/77			8.9
10650	STORE SEPARATION TEST COMPLETE	156	10/29/73	8/15/74			48.5
10660	COMPLETE FLUITED TESTS	157	6/10/74	2/ 6/75			43.5
10670	STATIC ARTICLE TESTS COMPLETE	158	7/ 1/75	6/26/77			92.1
10680	FATIGUE ARTICLE TEST PLANNING COMP	159	9/ 7/73	6/21/74			39.7
10690	FINAL ASSEMBLY COMPLETE	160	11/21/74	9/ 4/75			39.7
10700	1 LIFETIME FATIGUE TESTING COMP	161	7/30/75	5/11/76			39.7
10710	2 LIFETIMES FATIGUE TESTING COMP	162	1/ 6/76	10/15/76			39.7
10720	4 LIFETIMES FATIGUE TESTING COMP	163	7/ 9/76	4/29/77			39.7
10730	EGRESS STRUCTURAL TESTS COMP	164	10/22/73	8/30/74			43.7
10735	EGRESS TESTS DESIGN MODS COMP	165	6/16/73	2/26/74			43.7
10740	EGRESS TRACK TESTS COMP	166	3/27/74	2/ 6/75			43.7
10750	MISC TEST PLANNING COMP	167	3/19/73	3/ 8/74			49.3
10760	MISC TESTS COMPLETE	168	9/ 4/76	4/29/77			49.3

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10770	RELEASE VENDOR SPECS	169	3/13/73	8/ 6/73			11.5
10780	ISSUE RFQ	170	3/13/73	8/ 6/73			11.5
10790	SELECT VENDOR	171	4/24/73	7/17/73			11.8
10800	ISSUE PURCHASE ORDER	172	5/ 1/73	7/24/73			11.5
10810	RELEASE INSTALLATION DRAWINGS	173	5/21/74	10/17/74			2w.7
10820	QUALIFICATION TESTS COMPLETE	174	8/ 9/74	4/26/77			137.3
10830	RECEIVE COMPONENTS	175	6/24/74	9/16/74			11.5
10840	PRELIM DESIGN LOADS & CRITERIA SET	176	5/ 8/73	7/31/73			11.5
10850	FINAL DESIGN LOADS & CRITERIA SET	177	1/18/74	5/16/74			15.9
10860	VIBRATION & ACOUSTIC ANALYSIS COMPLETE	178	9/24/74	/21/77			131.1
10870	GUN LOCATION FREEZE	179	7/13/73	11/ 5/73			11.7
10880	GUN INSTALLATION DRAWING COMPLETE	181	5/21/74	8/14/74			11.7
10890	AVIONICS LONG LEAD ITEMS RELEASED	181	7/27/73	11/23/73			11.9
10900	AVIONICS INTEGRATION & TESTING COMPLETE	182	11/ 7/74	2/ 6/75			12.1
10910	DESIGN TO COST DEMO COMPLETE	183	3/27/74	1 / 1/74			28.1
10920	PDR	184	12/10/73	3/11/74			11.3
10930	PLR	185	3/21/74	6/11/74			11.3
10940	CDR	186	6/23/74	7/15/74			11.3
10950	SAFETY INSPECTION	187	10/16/74	1/ 7/75			11.3
10960	SPEC UPDATE	188	5/ 7/73	1/29/75			87.5
10970	PRELIM GUN INTERFERENCE DATA COMP	189	7/25/73	4/16/75			87.5
10980	AMCP ANALYSIS COMPLETE	190	12/10/73	9/ 9/75			87.5
10990	VULNERABLE AREA ANALYSIS	191	12/30/74	9/15/76			87.5
11000	FINAL GUN INTERFERENCE SPEC	192	8/ 4/75	4/28/77			87.5
11010	TRAINING PLANS COMPLETE	193	4/ 5/73	12/31/74			87.9
11020	FORMAL MTS DESIGN	194	7/ 9/73	4/ 2/75			87.9
11030	MTS DESIGN FREEZE	195	12/13/73	5/ 8/75			87.9
11040	MTS PDR	196	4/15/74	1/ 9/76			87.9
11050	MTS CDR	197	7/ 2/74	3/26/76			87.9
11060	MTS PCA/FCA	198	6/27/75	3/18/77			87.9
11070	DELIVERY OF MTS	199	7/31/75	4/28/77			87.9
11080	CFAE ORDERED	200	9/13/73	11/ 7/73			11.9
11090	CFAE RECEIVED	201	5/21/74	9/15/74			21.9
11100	GUN PDR	202	5/ 8/73	1/11/74			21.3
11110	RECEIVE PHASE I GUN	203	11/29/73	5/ 1/74			21.3
11120	GUN CDR	204	3/25/74	2/27/75			21.3
11130	GUN QUAL TESTS COMPLETE	205	2/28/75	7/31/75			21.3
11140	ENGINE HARDWARE DESIGN COMP	206	6/ 5/73	1/ 3/74			37.5
11150	ENGINE CDR	207	8/26/73	3/22/74			37.9
11160	AEDC ENGINE EXPLORATORY TESTS COMP	208	6/ 2/74	12/30/74			37.5

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11170	AEDC DUAL TESTS COMP	209	7/31/74	4/25/75			37.5
11180	RECEIVE ENGINE #1	210	8/30/74	5/28/75			37.5
11190	HOT APPROVAL	211	11/ 1/74	7/31/75			37.5
11200	DEARC IIIA	212	7/ 8/74	1/14/75			26.1
11210	AUTHORIZATION FOR INITIAL PRODUCTION	213	7/ 3/74	2/ 9/75			26.1
11215	DEARC IIIB	214	2/12/75	8/13/76			26.1
11220	LONG LEAD ITEMS OPT 1 FUNDING POINT	215	11/ 1/74	5/ 9/75			26.1
11230	LONG LEAD ITEMS OPT 2 FUNDING POINT	216	7/31/75	2/ 6/76			26.1
11240	DESIGN TO COST DEMO	217	8/27/75	3/ 5/76			26.1
11250	FCA	218	10/31/75	5/19/76			27.9
11260	PCA	219	12/ 3/75	6/18/76			27.9
11270	FCTCE PROGRAM START	220	4/ 2/76	8/27/76			29.9
11280	FCTCE PROGRAM END (PHASE I)	221	2/16/77	4/20/77			8.9
11290	1ST PRODUCTION A/C DELIVERY	222	10/20/75	12/19/75			7.1
11300	OPERATIONAL UNIT IOC	223	12/ 8/77	12/ 8/77			0.0
11310	SATAF ACTIVATED	224	4/29/77	6/21/77			7.1
10640	COMPLETE WIND TUNNEL TESTS	208	5/21/75	3/11/76			40.5

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