U.S. AIR FORCE
Project RAND

THE COST OF DECREASING VULNERABILITY OF AIR BASES BY DISPERSAL

Dispersing a B-36 Wing

June 1, 1952

R-235

The RAND Corporation
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PROJECT RAND

(USAF PROJECT RR 1)

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Cost analysis section

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SUMMARY

This research study examines the cost of decreasing the vulnerability to air attack of a B-36 wing by dispersal. Cost estimates are presented for

1. A new single-based B-36 wing.
2. A new dispersed B-36 wing (three bases).
3. Dispersal of an existing B-36 wing (two new bases).

It is estimated that a new dispersed B-36 wing (three bases) would be 20 per cent more costly than a new single-based wing. Dispersal of an existing wing by the addition of two new bases would cost 25 per cent more than establishment of a new single-based wing. Either method would ensure survival of two-thirds of the wing's striking power against a single enemy bomb on target.

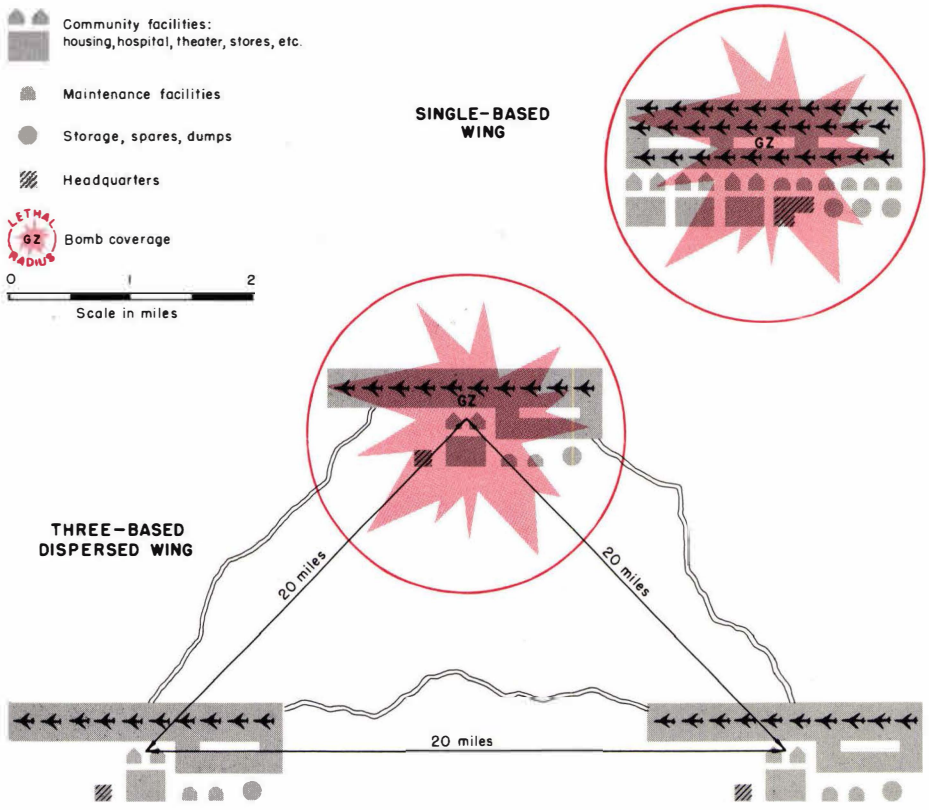

Fig. 1—Decreasing the vulnerability of an air base by dispersal

GENERAL CONCEPT

Assuming that our strategic air capability will be an important or primary target in an enemy's first bombing attack against the United States, this study was undertaken to determine the ways in which vulnerability of the Strategic Air Command's tactical units might be reduced and to estimate the costs that would be incurred in alternative schemes for reducing vulnerability. Particular emphasis was placed first on minimizing the risk incurred at each of the points which the enemy might select as specific targets and next on maximizing the operational capability of that part of the force which survives the enemy strike.

The optimum measure of reduced vulnerability is viewed as a combination of the degree of safety attained and the cost of obtaining it. In preliminary work various alternatives were examined, including the dispersion of aircraft and crews and other selected elements of the present wing organization. A number of possible changes in the physical location of selected activities were reviewed. In evaluating the large number of variations available, the two considerations which were paramount were first, operational feasibility of the proposed change as a permanent plan of operation and secondly, the additional costs incurred in the spectrum of plans. Since full operational capability was assumed to be the most desirable objective, the more limited types of dispersal which might be provided separately to aircraft, crews, or other specialized elements were rejected and are not described here.

In this study, therefore, the dispersal of a combat wing operating thirty heavy-bombardment aircraft in three squadrons of ten aircraft each is considered. The proposed pattern of dispersal comprises three separately based, self-sufficient tactical squadrons separated by distances of about 20 miles.

It may be worth emphasizing that the primary goal has been to retain complete operational capability for all surviving elements. Dispersion of specialized elements of the wing, such as aircraft, crews, and selected specialized personnel, protects some of the essential elements but leaves many of the parts required for full operational capability at risk. The tactical squadron which is the surviving unit in the plan described is fully operational, not only with respect to bombardment aircraft, crews, and certain specialized personnel, but also in terms of intelligence data, target maps, and a large variety of other special organizational equipment and personnel. The squadrons are organized on the

present wing concept and are located in a small area so as to continue the benefits now inherent in wing organization.

When the wing is dispersed into separate squadrons, there is an increase in the number of target points subject to enemy attack and a decrease in their individual importance. This reduces the enemy's capabilities for damage if he has a limited number of specialized bombs and bombardment aircraft for this specific mission. At a rate of expenditure of one bomb per base, the cost to the enemy for the complete destruction of a wing is at least trebled. Or, if the enemy uses but one bomb per wing, the surviving squadrons within each wing are not only capable of continuing operations against the enemy, but also of furnishing services and facilities for as many of the aircraft and personnel as have managed to escape destruction at the damaged base. In other words, not only is the number of target points tripled, but there is a threefold increase in the number of operational fields.

PROCEDURE USED IN THIS STUDY

Dispersal of a B-36 wing was considered in this case study. From existing Air Force information, the complete costs of B-36 operations were assembled. The results of the study not only reveal the costs of dispersal, but also provide some idea of the money value of what is at risk in a heavy-bombardment wing.

In assigning physical locations to the groups of personnel and materiel, it was assumed that the minimum practicable operating unit is the squadron. This analysis has therefore projected the organizational and operational changes involved in dispersal by squadrons and has estimated the requirements and costs for personnel, construction, equipment, and materiel. Provision has been made for necessary augmentation of all types of operational support and administrative personnel and of equipment, supplies, and reserve stocks for each of the three squadrons.

For purposes of comparison and analysis, costs were estimated—both the initial capital investment and the annual requirements for operations, maintenance, and replacements—for the three following situations:

1. Single-based wing (new).
2. Dispersed wing—three bases (new).
3. Dispersal of an existing single-based wing.

ASSUMPTIONS

The general assumptions which governed the preparation of dollar estimates are listed below. Special assumptions, relating to individual elements of cost, are included in the description of methodology in the appendices (pages 17 through 70).

1. The utilization rate of personnel and equipment will continue as in the past.
2. The technology currently associated with B-36 functions will not change substantially during the dispersal period.
3. The bases are located in Texas. There are no unusual problems of terrain, and space for bases can be acquired without encroaching on heavily populated urban or suburban areas.
4. Organization, manning, equipment, and operation are on a readiness basis. The organizational structure follows the current SAC plan.
5. The only deviations from current Air Force and Strategic Air Command planning factors are those occasioned by the dispersal of the wing.
6. In the dispersed wing, individual squadrons are located on separate bases, separated by distances of about 20 miles.
7. Each dispersed squadron base should be able, if necessary, to operate as an independent unit. Destruction of, or serious damage to, one or more of the bases should not prevent full and immediate operation of the remaining base or bases.
8. Complete dispersal requires that each squadron have all the facilities, equipment, supplies, and personnel required to perform all necessary functions of command, maintenance, and operations.
9. Investment costs include the recruiting and training of all personnel, construction of new bases, and initial procurement of all equipment, materials, and supplies except second-line unit support aircraft.

SUMMARY OF RESULTS

The cost estimates, summarized in Tables 1 and 2, indicate that if the assumptions and methods used can be considered reasonably valid and realistic, dispersal of the type contemplated will increase the investment cost of a new B-36 wing by about one-fifth over that of a new conventional single-based wing. Dispersal of a B-36 wing already operating from a single base would entail an additional investment cost of about one-quarter of the investment cost of the new single-based wing. In either case, the annual cost of operating and maintaining the dispersed wing would be about one-fifth greater than that of the single-based wing. In a sense, this cost of dispersal might be considered as a form of insurance premium against destruction by enemy air attack—i.e., not more than one-third of the operating capacity of the wing could be destroyed by a single bomb, or not more than two-thirds by two bombs.

The major additional operating costs incurred by dispersal would be those occasioned by the required increase in personnel—an estimated increase of about 37 per cent in number. The largest single item of investment cost—the cost of the aircraft—would not be affected by the dispersal plan. Likewise, there would be no significant change in the costs of operation and maintenance (other than personnel) of the mission aircraft.

Of the costs associated with the mission aircraft, the only one which would increase substantially with dispersion would be the investment cost in aircraft facilities—the runways, taxiways, hardstands, aprons, hangars, shops, etc. Except for personnel costs, any augmentation in operating and maintenance costs for the aircraft would be very small.

Those costs directly associated with the number of personnel—training, pay and allowances, and travel—would increase in direct proportion to the increase in manning. Costs of personnel facilities (the buildings and facilities required to house and serve personnel) would increase almost in proportion. In this analysis it was assumed, in the absence of more detailed data, that costs of miscellaneous services would also increase proportionately with personnel.

There is no indication that ten aircraft per dispersed base is an optimum number. There is an inherent limitation to this study which arises from the present organizational structure of the wing. It would have been difficult to divide a single-based wing into two, four, five, or six parts as the initial step

Table 1

COMPARATIVE COSTS OF SINGLE-BASED AND DISPERSED B-36 WINGS, NEWLY ORGANIZED

Readiness Manning and Operation; Location, ZI; 30 Aircraft, 30 Crews

(Cost estimates per wing in millions of dollars)

Items Costed	Present Organization		Proposed Organization		Proposed Organization	
	Single-Based Wing (4426 Personnel)		Dispersed Wing (6053 Personnel)		Reorganized and Deployed from a Single-Based Wing (6053 Personnel)	
	Investment	Operating	Investment	Operating	Investment	Operating
Installations						
Equipment facilities	28.3	....	53.9	....	35.9	....
Personnel facilities	20.7	....	33.5	....	22.3	....
Maintenance	.....	2.5	.....	4.4	....	4.4
Major equipment						
Mission aircraft	121.2	4.4	121.2	4.4	....	4.4
Support aircraft	12.1	....	12.1	....	....	....
Minor equipment	11.0	0.7	18.9	1.2	7.9	1.2
Stocks						
Initial stock level (less aircraft spares)	2.9	....	4.0	....	1.1	....
Readiness reserve (less aircraft spares)	3.4	....	3.9	....	0.5	....
Aircraft spares	58.7	....	59.4	....	0.7	....
Transportation	1.1	1.4	1.7	1.9	0.6	1.9
Personnel						
Training	26.7	6.7	33.6	8.4	6.9	8.4
Pay and allowances	.....	13.6	.....	18.6	....	18.6
Travel	1.0	0.8	1.4	1.2	0.4	1.2
Maintenance						
Mission aircraft	.....	15.8	.....	15.8	....	15.8
Support aircraft	.....	0.2	.....	0.4	....	0.4
POL						
Mission aircraft	.....	4.6	.....	4.6	....	4.6
Support aircraft	.....	0.1	.....	0.2	....	0.2
Miscellaneous	.....	1.7	.....	2.3	....	2.3
Service and miscellaneous	.....	1.8	.....	2.5	....	2.5
TOTAL	287.1	54.3	343.6	65.9	76.3	65.9

Table 2

COSTS OF DEPLOYMENT COMPARED WITH COSTS OF ORIGINALLY ORGANIZING THE B-36 WING FOR DISPERSAL

Readiness Manning and Operation; Location, ZI; 30 Aircraft, 30 Crews

(Cost estimates in millions of dollars)

	Proposed Organization	Proposed Organization
	Reorganized and Deployed from a Single-Based Wing (6053 personnel)	Dispersed Wing Organized Originally for Dispersal (6053 personnel)
	Incremental Costs over Those of a Single-Based Wing	Incremental Costs over Those of a Single-Based Wing
Items Costed	Investment	Investment
Installations		
Equipment facilities	35.9	25.6
Personnel facilities	22.3	12.8
Major equipment	0	0
All other items	18.1	18.1
Incremental investment	76.3	56.5
Cost single-based wing	287.1	287.1
TOTAL INVESTMENT	363.4	343.6

Table 3

AUGMENTATION OF THE DISPERSED SQUADRON

Number of Aircraft Assigned to Each Dispersed Base	Average Investment Costs per Aircraft ($ million)	Average Operating Costs per Aircraft ($ million)	Average Number of Personnel per Aircraft
10	11.45	2.20	202
11	11.04	2.07	189
12	10.70	1.96	179
. .	. . . . .	. . . .	. . .
. .	. . . . .	. . . .	. . .
15	10.13	1.91	158
Costs at 30 aircraft per single-based wing	9.57	1.81	148

in this study, because the fundamental organization of the wing does not go below ten-aircraft squadrons. The number of aircraft per dispersed base for which costs can be computed with reasonable accuracy is therefore limited to some number near ten. Estimates of cost become progressively less reliable as the proposed number of aircraft per dispersed base varies from ten.

On the basis of the opinions of planning and operating personnel, rough extrapolations have been made which indicate some savings in costs per aircraft as the number of aircraft assigned to each dispersed base is increased. These are given in Table 3, page 9.

This tabulation of changes in unit cost, resulting from an increase in the number of aircraft per squadron, is presented to indicate one way in which economies may be effected. However, it should be noted that increasing the number of aircraft per base increases the unit at risk and therefore the value of each target to the enemy.

QUALITATIVE CONSIDERATIONS

Only qualitative tests can be applied to some of the problems of dispersal. One of the most difficult of these is how to distribute the wing headquarters functions in a way which would not disproportionately diminish the capabilities of the surviving elements if one or two dispersed bases were destroyed. One view that might be taken of the headquarters or command functions is that they are essentially communications or direction functions. In this broad sense, such a headquarters is engaged in translating instructions from the next higher headquarters into information meaningful to subordinate elements.

For study purposes, to minimize the effect of the loss of wing headquarters, each dispersed base is given a communications channel of sufficient capacity to handle and translate the flow of information. To accomplish this, each base is assigned sufficient personnel to receive orders from the headquarters above wing level and to do detailed planning, coordinating, and reporting. This means that if the wing headquarters is lost, there are sufficient skills and reserve capacities at each of the bases to make each one capable of assuming operational control of what remains of the wing after an attack.

The dispersal of wing headquarters functions does not imply a by-passing of the wing command. It does imply as insurance, however, that all information sent from higher headquarters to the wing is also sent to each dispersed base. In the event of destruction of the base on which wing headquarters is located, one of the remaining squadron headquarters, by prearranged plan, will immediately assume wing command and the operations staff functions.

Other problems which can be attacked only qualitatively are the distribution problems associated with critical supplies and personnel. The state of the art of military procurement is such that much equipment and many spares are difficult to secure for even a concentrated wing. Many more difficulties can be anticipated when the clusters of equipment and supplies are separated by miles. As the present procurement system functions, the solution is not a matter of merely increasing stocks, but of emphasizing the "give and take" among the three bases so that existing supplies are used most efficiently. There seems to be no real obstacle to this interaction if an adequate road net is provided.

Similarly, the dispersed wing increases the specialized requirements for ex-

perienced personnel. In the cost estimates on personnel, training costs have been expressed but experience has not. The Air Force as a whole has an inventory and a flow of experience which is relatively limited. Dispersal will be a double charge against available experience. To secure equivalent combat potential for the dispersed wing, as opposed to a concentrated wing, not only are more individuals required, but many of the individuals must be more versatile. The second charge against experience follows from the reasoning that each dispersed base will be subject to the entire range of problems to which a single-based wing is subject.

Although dispersal will impose rigorous demands for specialized personnel and equipment, fulfillment of these demands will provide a major form of insurance. There will be a threefold increase in the more complex equipment and the more highly trained individuals. This is not only insurance for survival; it is also a provision for a more satisfactory basis for augmentation if the emergency should permit expansion of force.

The additional bases of a dispersed wing not only provide a refuge and assembly point for personnel and materiel surviving a blast at the target base, but also permit temporary expansion for other purposes. Each base has inherently more capacity than is used in the dispersed plan. If the situation is such that concentration seems desirable on a temporary basis, it can be accomplished with some facility. Return of aircraft in bad weather is facilitated by having three bases in the immediate area rather than one. This "area flexibility" may be an advantage in the event of trouble with aircraft immediately after take-off.

Through the establishment of many more self-sufficient units, more independent approaches to B-36 operations might result in a more rapid solution of common B-36 problems and in the development of more personnel with above-average initiative, self-sufficiency, and independence. It seems likely that a small organization, such as might be represented by a dispersed base, may be better able to make internal adjustments and arrangements than the larger, concentrated single-based wing. For purposes of economy, many of the facilities and services of a concentrated wing organization are established on a production-line basis, and although they serve the general needs of the base, they satisfy no user completely. In the smaller organization, such facilities and services, while not as economically established and operated, might increase the efficiency of other activities because they can be tailored to needs. Weather services furnish an example. It is probably not possible for the detachment to furnish each squadron of the concentrated wing with weather information in

the detail that a separate weather detachment can furnish such information for one dispersed squadron.

The dispersed wing probably has a significantly greater capacity for sustained operations under pressure. Many of the diseconomies of dispersal arise as a consequence of providing extra facilities and a proportionately greater number of specialists. Under stress these facilities operate as a reserve. The aviation squadron activities are a case in point. Whereas the concentrated base has one production line for the preparation of bombs, the dispersed wing has three.

The dispersed squadrons can be expanded rapidly to three wings in the event of mobilization. Facilities and a nucleus of all specialist personnel already exist at the dispersed bases, so that organizational training is simplified and movement to a new training base is eliminated.

CONCLUSIONS

This research study examined the problems of decreasing the vulnerability of our strategic air capabilities to enemy attack. An effective retaliatory striking power can only be maintained if that part of our force which survives enemy attack is fully operational. This seems most readily attainable by increasing the number of self-sufficient units and by decreasing the risk or size of each one.

The study therefore examined the additional costs incurred in dispersing a B-36 wing. The added burden appears to be from one-fifth to one-fourth of the present budget for these units. Although wings operating other types of aircraft and at locations other than Texas were not considered in this study, it would appear that the increased cost of dispersal would not vary substantially.

If the findings of this research study seem worth while, further studies should be made by Air Force personnel more intimately aware of the detailed problems involved.

Parallel research is now in progress at RAND concerning other aspects of the problem of reducing the vulnerability of Air Force activities through dispersal.*

* One of these studies is described in *Decreased Vulnerability by Dispersal: Costs of Dispersal of Heavy Bombardment Force, FY 1953–FY 1958*, The RAND Corporation, Cost Analysis Section, Research Memorandum RM-855, May 14, 1952

APPENDIX I

METHODOLOGY

INSTALLATIONS

The estimates of requirements and of the initial construction cost of equipment and personnel facilities for the single-based wing were developed from planning factors prepared by the Directorate of Installations, HqUSAF.[1][2] A detailed listing of the types and costs of facilities provided is given in Appendix II.

Provision was made for 82 per cent of the airmen to be housed in dormitories and for 10 per cent of the officers to be housed in BOQ's in all cases. For the single-based wing, it was assumed that a substantial number of married officer and top-grade NCO personnel would find accommodations in a nearby city; but for the dispersed wing, a higher proportion would be provided with family housing on the base.

In accordance with the requirement that each squadron base be capable of fully independent operations, provision was made for the construction of all operating and maintenance functions on a scale proportionate to the effort required.

Annual maintenance of facilities was estimated, for both single-based and dispersed wings, at 5 per cent of the initial cost. This estimate covers the cost of materials and contractual services required for maintenance; costs of military personnel are included in the estimate for personnel costs. The maintenance factor was developed from an analysis of "Real Estate Facilities Management and Preservation Monthly Cost Reports" from selected Air Force bases for FY 1950 and for the first four months of FY 1951.

MAJOR EQUIPMENT

The cost of the thirty B-36 aircraft per wing was taken from Air Force budget estimates for FY 1952.[3] The estimated costs are for complete aircraft, including all government-furnished equipment. Spares and spare parts are included in the account heading "Stocks."

An allowance of 10 per cent[4] of the cost of the mission aircraft was added for command support aircraft. Unit support aircraft were assumed to be available from existing second-line stocks of aircraft; their cost was therefore excluded from the estimates.

The annual replacement cost of mission aircraft was based on estimated peacetime attrition rates given in Air Force planning factors.[4] Maintenance and operating costs of both mission and unit support aircraft are considered in later sections under separate headings.

MINOR EQUIPMENT

The estimated cost of T/O & E equipment was developed from Air Materiel Command estimates[5] for a B-36 wing of eighteen aircraft. An estimate of the augmentation required for a wing of thirty aircraft was obtained from the staff members who prepared the original AMC report. This estimate was based on the normal wing organizational structure instead of on the Strategic Air Command organizational structure, since equipment costs are not available for the latter at the present time. Except for trainers, no T/A equipment cost was included, since it was believed that the cost of full authorization of T/O & E equipment would be adequate. Theoretically, when T/A equipment is used, approximately that same amount of T/O & E equipment will not be used, leaving the total amount of equipment in use approximately unchanged. This does not apply to trainers which, according to present operational practices, will be used in peace or war.

After consultation with staff representatives from the Strategic Air Command, a rough method was developed for adjusting the above figure for the single-based wing to one for a dispersed wing. No change in costs was made for the Wing Headquarters and Headquarters Squadron, Group Headquarters Squadron, Maintenance and Supply Group Headquarters Squadron, Air Base Group Headquarters Squadron, and the three tactical squadrons. The number of personnel remained roughly the same for these as a group, and it was assumed that the equipment needed at each base could be easily divided into three sections. A factor of three was applied to the following organizations: Maintenance Squadron, Communications Squadron, Air Police Squadron, Installations Squadron, Aviation Squadron, AACS Detachment, and Weather Detachment. It was felt that these would either have heavy pieces of equipment that would have to be duplicated at each site or that the unit required at each site would be of approximately the same size as that for the wing (e.g., Air Police). A factor of two was applied to the Supply Squadron, Motor Vehicle Squadron, and the Medical Group. Some equipment in these squadrons would be divisible by three, and the size of the squadrons would be somewhat reduced It is believed that doubling the Motor Vehicle Squadron would allow for the additional busses required for commuting from base to base. The Food

Service Squadron was adjusted proportionally to the increase in personnel on the assumption that food-service equipment would vary directly with this factor.

Minor equipment costs were assembled as shown in Table 4.

Table 4

COSTS OF MINOR EQUIPMENT FOR SINGLE-BASED AND DISPERSED B-36 WINGS BY SQUADRON AND DETACHMENT

Squadron or Detachment	Cost for Single-Based Wing	Factor for Adjusting to Dispersed Wing	Cost for Dispersed Wing
Wing Headquarters and Headquarters Squadron	$ 39,000	None	$ 39,000
Bomb Group Headquarters	61,000	None	61,000
Bomb Squadron (3)	4,826,000	None	4,826,000
Maintenance and Supply Group Headquarters Squadron	5,000	None	5,000
Maintenance Squadron	1,503,000	3.0	4,510,000
Supply Squadron	582,000	2.0	1,164,000
Communications Squadron	89,000	3.0	266,000
Food Service Squadron	68,000	1.6*	109,000
Air Base Group Headquarters and Headquarters Squadron	138,000	None	138,000
Air Police Squadron	47,000	3.0	141,000
Installations Squadron	375,000	3.0	1,125,000
Motor Vehicle Squadron	864,000	2.0	1,729,000
Medical Group	119,000	2.0	239,000
Aviation Squadron	332,000	3.0	996,000
TOTAL WING COST	$9,048,000†	....	$15,348,000
Weather Detachment	70,000	3.0	210,000
AACS Detachment	400,000	3.0	1,200,000
WING COST PLUS DETACHMENTS	$9,518,000	....	$16,758,000
Trainer Equipment (ECM, K-1 Radar, etc.) Not Identified by Squadron	1,461,000‡	Not applicable	2,108,000
TOTAL MINOR EQUIPMENT	$10,979,000	....	$18,866,000

Note: Any discrepancies in figures adjusted by factors are due to rounding.

* Based on the food service personnel augmentation of 60 per cent.

† Includes four sets of K-1 mockups at $435,000 each, whereas under the SAC plan, only two are required, but it is believed that increases in authorizations since July, 1950, would take up this excess ($870,000).

‡ Includes two sets of K-1 mockups. At Carswell, the two excess sets from the wing are being used for the trainers. It was felt that it would be misleading not to cost this equipment, however.

The annual replacement cost for organizational equipment was estimated at 6 per cent of the initial investment cost. This factor was developed from a random sample of replacement factors of Air Force materiel.[6] Maintenance of organizational equipment is included in "Service and Miscellaneous" costs.

STOCKS

For convenience of estimation and presentation, stock-level estimates have been broken down into three components: (1) initial stock level, (2) war reserve, and (3) spares.

The estimate for *initial stock level* includes those supply costs which are occasioned by the aircraft wing but which do not appear as annual charges. The allowance for all supplies except fuel and lubes and aircraft spares and spare parts consists of 345 days' supply at the annual consumption rate—i.e., $^{345}/_{365}$ of the estimated annual supply costs. This allowance was suggested by Headquarters, Air Materiel Command in a critique of an earlier study and is the allowance suggested for most items in the FY 1953 budget guidance.[7] It provides for 6 months' procurement lead time and for 5½ months' base and depot stock levels and pipelines.

The initial-stock-level allowance for aviation fuel and lubes is 75 days' supply at peacetime consumption rates.[7] Other fuels and lubes are included at 90 per cent of capacity of base storage facilities.[1]

Stock levels and lead time for aircraft component spares and spare parts are included under the entry "Aircraft Spares."

A 90-day *readiness-reserve* allowance was made for supplies used in installations and services and for personnel. A war reserve stock of aviation fuel and lubes was estimated at 75 days' supply at war-consumption rates. The allowance for other fuels and lubes was also estimated at 75 days' supply, but at peacetime consumption rates. War reserves of ammunition and bombs were not included in this study; it was felt that the cost of these items could be estimated more accurately by those who prepare the estimates in considering a specific war plan or operation.

The estimate for *spares* (including aircraft spare parts) was based on budget estimates for FY 1952.[3] This figure includes stock-level and pipeline requirements, as well as readiness-reserve requirements. It also includes engine requirements for the first-line life of the aircraft.

One adjustment was made to these budget estimates. The budgeted total includes, among other items, the estimated maintenance materiel requirements

for the first year's operation of the aircraft. Since this cost is included in the present study as an annual cost under the heading "Maintenance—Mission Aircraft," it was deducted from the budget estimate.

TRANSPORTATION

Transportation costs were based on an average shipping distance of 1000 miles. An estimated cost of $50.00 per ton, including packaging, was developed from tonnage data and cost obtained from the Traffic Division at Headquarters, Air Materiel Command. The tonnage to be transported (excluding POL) was estimated from planning factors obtained from AFM 400-5.[8] The cost of transporting POL is included in the estimated cost of the POL.

PERSONNEL

As indicated in the introduction, estimates of required personnel strengths were developed from a basic wing structure patterned after the current SAC plan as given by SAC Regulation 20-15. A description of the basic organization and of the method of augmenting this organization for the dispersed wing, together with personnel tables, is given in Appendix III.

Initial *training* costs were computed separately for aircrews and for non-aircrew officers and airmen. The source of dollar costs is *Costs of Training USAF Students by Courses.*[9]

A total cost, including basic training, was computed for each crew according to its composition with respect to Air Force Specialty Codes and Specialty Serial Numbers. For non-aircrew officers and airmen, over-all averages were computed from the same source, one for officers and one for airmen.

The annual cost for training replacements was based on an assumed peacetime attrition factor of 25 per cent for discharge, resignation, return to inactive status, retirement, or death of military personnel.

To determine the annual *pay and allowances* of military personnel, an average annual figure per man was computed by costing the grade distribution for a B-36 wing (peacetime). The dollar costs were obtained from budget estimates for FY 1951.[10]

These estimates include basic pay, flying pay, quarters allowance, subsistence for officers, average subsistence paid airmen, clothing-maintenance allowance, death gratuities, terminal leave, and re-enlistment bonuses.

Pay of civilian employees was estimated at $3300 per man per year. This

estimate was derived from budget estimates for FY 1951,[10] adjusted for subsequent increases.

TRAVEL

Costs per man were developed from information obtained at the Directorate of Transportation, HqUSAF. The average distance traveled in the ZI by military personnel was assumed to be 1000 miles. Allowances were included for the travel of dependents and for the shipment of household goods of officers and of the first three grades of airmen.

Annual costs were assumed to be 85 per cent of initial costs. This assumption was based on an estimated annual peacetime attrition rate of 25 per cent (for discharge, retirement, death, etc.) and on an annual rate of 60 per cent for permanent change of station.

MAINTENANCE

Maintenance costs for both mission and support aircraft were developed from average costs per flying hour, computed and published by DCS/Comptroller.[11] For mission aircraft, an average of 50 flying hours per aircraft per month was assumed. For MIT (minimum individual training) and tactical unit-support aircraft, the models and rates of utilization were obtained from Air Force peacetime planning factors.[4]

The only aircraft maintenance and operation costs that were augmented with dispersion of the wing were those for unit support aircraft. The authorization for two C-47 aircraft for tactical unit-support for a single-based wing was increased by one plane to provide one C-47 for each of the three squadron bases. The estimated number of MIT aircraft—fifteen T-11's for the single-based wing and eight T-11's for each of the three dispersed bases—was developed from Air Force peacetime planning factors[4] applied to the estimated proportion of non-aircrew officers maintaining flying proficiency.

POL

The estimated costs of POL (petroleum, oil, and lubricants) were obtained from DCS/Comptroller's estimated flying-hour costs.[11] For mission aircraft, an average of 50 flying hours per aircraft per month was assumed. The number of flying hours per month of unit support aircraft was developed from Air Force planning factors.[4]

Miscellaneous POL requirements include fuel for heating, cooking, and the

motor pool. The physical requirements given in AFM 400-5[8] were costed at rates given in "Program 121-8," Headquarters, Eastern Air Defense Force, December 19, 1950.

SERVICE AND MISCELLANEOUS

The estimate for "service and miscellaneous" costs covers all annual operating and maintenance costs not included in the cost categories described above. This estimate comprises the cost of materials and supplies for such functions as administration, flight service, supply operations, medical service, food service, and operation and maintenance of organizational equipment. The estimated costs were based on an analysis of cost reports of seven combat wings in the Continental Air Command for the month of August, 1950.[12]

APPENDIX II

CONSTRUCTION ESTIMATES

Table 5 (pages 26 through 30) shows in detail the determination of construction requirements and costs which were developed in the analysis of the B-36 dispersed wing. The procedures, assumptions, and concepts involved have been described above.

The fourth and fifth columns of Table 5 show the construction requirements and costs for a single-based heavy-bombardment wing, as specified in *USAF Installations Facility Requirements*, published by Directorate of Installations, DCS/M, July, 1951.[1] Estimated unit costs were obtained from *Cost Estimates for U. S. Air Force Construction*, published by Office, Chief of Engineers, Department of the Army, August 1, 1951.[2]

Columns 6 and 7 show the estimated requirements and costs for a dispersed wing of the type contemplated in this analysis. The last two columns in the table show the estimated incremental construction requirements and costs for dispersal of a single-based wing which is already in existence.

Table 5

ESTIMATED COSTS OF B-36 WING INSTALLATIONS

	Price ($)	Unit	Single-Based Wing		Dispersed Wing—New 10 Aircraft per Base		Dispersal of Existing Single-Based Wing 10 Aircraft per Base	
			Requirement	Cost ($ million)	Requirement	Cost ($ million)	Requirement	Cost ($ million)
Airfield								
Runways	1.33	sq ft	3,660,000	4.868	10,980,000	14.603	7,320,000	9.760
Taxiways	12.00	sq yd	200,000	2.400	600,000	7.200	400,000	4.800
Aprons								
Maintenance	12.00	sq yd	87,000	1.044	180,000	2.160	120,000	1.440
Transient and base flight	7.20	sq yd	500,000	0.360	90,000	0.648	60,000	0.432
Hardstands (light)	3.30	sq yd	165,000	0.545	165,000	0.545	110,000	0.363
Hardstands (heavy)	4.50	sq yd	116,000	0.522	116,000	0.522	78,000	0.351
Warm-up pads	12.00	sq yd	88,000	1.056	264,000	3.168	176,000	2.112
Compass swing base	75,000.00	each	1	0.075	3	0.225	2	0.150
Liquid fuel storage and dispensing facilities								
Avgas bulk storage	0.10	gal	2,720,000	0.272	3,000,000	0.300	2,000,000	0.200
Jet fuel bulk storage	0.10	gal	100,000	0.010	105,000	0.011	70,000	0.007
Mogas facilities	0.10	gal	30,000	0.003	30,000	0.003	20,000	0.002
Diesel fuel facilities	0.10	gal	20,000	0.002	21,000	0.002	14,000	0.001
Heating fuel	0.10	gal	500,000	0.050	600,000	0.060	400,000	0.040
Luboil storage facilities	0.10	gal	85,000	0.009	90,000	0.009	60,000	0.006
Hydrants	100,000.00	each	15	1.500	15	1.500	10	1.000
Communications, NavAids, and airfield lighting								
Communications building	15.00	sq ft	5,473	0.082	12,000	0.180	8,000	0.120
Transmitter and receiver building	17.00	sq ft	8,000	0.136	24,000	0.408	16,000	0.272
GCA, electronic and navigation aids	500,000.00	each	1	0.500	3	1.500	2	1.000

Airfield lighting	540,000.00	each	1	0.540	3	1.620	2	1.080
Radio link relay building	9.50	sq ft	750	0.007	2,100	0.020	1,400	0.013
Antenna farm	70,000.00	each	1	0.070	3	0.210	2	0.140
Operational facilities								
Control tower	12.50	sq ft	1,250	0.016	3,750	0.047	2,600	0.033
Base operations	12.50	sq ft	20,900	0.261	25,000	0.313	16,000	0.200
Squadron operations	11.00	sq ft	39,000	0.429	54,000	0.594	36,000	0.396
Crash and structure station	13.00	sq ft	11,830	0.154	36,000	0.468	24,000	0.312
Photo laboratory	15.00	sq ft	5,000	0.075	15,000	0.225	10,000	0.150
Parachute and dinghy building	14.00	sq ft	10,000	0.140	21,000	0.294	14,000	0.196
Hydrogen building	21.00	sq ft	1,240	0.026	3,600	0.076	2,400	0.050
Briefing rooms	11.00	sq ft	10,000	0.110	12,000	0.132	8,000	0.088
Aircraft maintenance facilities								
Aviation squadron building	14.50	sq ft	10,000	0.145	30,000	0.435	20,000	0.290
Base maintenance shops	15.00	sq ft	80,000	1.200	60,000	0.900	40,000	0.600
Engine build-up building	14.00	sq ft	39,400	0.552	60,000	0.840	40,000	0.560
Armament and electronic shop	11.00	sq ft	20,000	0.220	21,000	0.231	14,000	0.154
Wing- or nose-type hangar	80,000.00	each	14	1.120	15	1.200	10	0.800
Reclamation building	11.00	sq ft	1,800	0.020	6,000	0.066	4,000	0.044
Reclamation yard	1.50	sq yd	4,000	0.006	6,000	0.009	4,000	0.006
Training facilities*								
Training and academic buildings	11.00	sq ft	50,000	0.550	60,000	0.660	40,000	0.440
Celestial navigation training building	30.00	sq ft	3,700	0.111	9,000	0.270	6,000	0.180
Physiological high-altitude training building	14.00	sq ft	8,600	0.120	24,000	0.336	16,000	0.224
Gunnery range	15,000.00	each	1	0.015	1	0.015	0	0
Rifle range	5,000.00	each	1	0.005	3	0.015	2	0.010
Troop housing facilities*								
Dormitory (82% of airmen)	1,275.00	man	2,945	3.755	4,071	5.191	2,596	3.310
BOQ	6,726.00	officer	53	0.356	148	0.995	94	0.632
Mess (airmen)	575.00	man	3,592	2.065	4,965	2.855	3,166	1.820
Family housing*								
NCO and officer housing	12,400.00	man	160	1.984	443	5.493	281	3.484

* All costs attributable to personnel.

Table 5—continued

	Price ($)	Unit	Single-Based Wing		Dispersed Wing—New		Dispersal of Existing Single-Based Wing	
					10 Aircraft per Base		10 Aircraft per Base	
			Requirement	Cost ($ million)	Requirement	Cost ($ million)	Requirement	Cost ($ million)
Administrative and community facilities								
Wing headquarters	12.00	sq ft	25,000	0.275	5,000	0.060	0	0
Maintenance and control	11.00	sq ft	6,600	0.073	12,000	0.132	8,000	0.088
Air base group headquarters	11.00	sq ft	16,600	0.183	31,200	0.343	20,800	0.229
Air police	10.00	sq ft	2,000	0.020	6,000	0.060	4,000	0.040
AIO administrative	11.00	sq ft	10,764	0.118	24,000	0.264	16,000	0.176
Post exchange*	13.00	sq ft	19,900	0.259	24,000	0.312	16,000	0.208
Exchange service station*	550.00	pump	4	0.002	6	0.003	4	0.002
Commissary*	12.00	sq ft	7,000	0.084	13,000	0.156	6,000	0.072
Bakery*	18.00	sq ft	6,000	0.108	6,000	0.108	0	0
Laundry and dry cleaning plant*	22.00	sq ft	24,600	0.541	24,600	0.541	0	0
Bank*	17.50	sq ft	3,900	0.068	3,900	0.068	0	0
Post office*	14.00	sq ft	3,800	0.053	7,800	0.109	4,000	0.056
Gym*	16.00	sq ft	23,700	0.379	48,000	0.768	32,000	0.512
Guardhouse*	16.50	sq ft	10,000	0.165	10,000	0.165	0	0
Gatehouse*	9.50	sq ft	776	0.007	2,328	0.022	1,552	0.015
Theater*	390.00	seat	1,000	0.390	1,050	0.410	700	0.273
Chapel*	500.00	seat	500	0.250	600	0.300	400	0.200
Library*	14.00	sq ft	2,500	0.035	3,500	0.049	2,000	0.028
Service club*	13.00	sq ft	26,700	0.348	54,000	0.702	36,000	0.468
NCO's club*	13.00	sq ft	14,330	0.186	25,320	0.329	16,880	0.219
Officer's club*	13.00	sq ft	16,500	0.215	33,000	0.429	22,000	0.286
Red Cross building*	10.00	sq ft	4,000	0.040	4,000	0.040	0	0
Dependents' school*	1,100.00	pupil	1,200	1.320	1,500	1.650	1,000	1.100
Recreational area*	50,000.00	each	1	0.050	1	0.050	0	0

Utilities								
Water†								
Base supply pumping capacity	0.45	gal/day	729,000	0.328	810,000	0.365	540,000	0.243
Base storage capacity	0.24	gal	550,000	0.132	600,000	0.144	400,000	0.096
Distribution system	9.60	ln ft	110,000	1.056	200,000	1.920	125,000	1.296
Sewage disposal*								
Base treatment plant capacity	45.00	person	4,426	0.199	6,053	0.272	3,834	0.173
Collection system	13.00	ln ft	90,000	1.170	180,000	2.340	120,000	1.560
Electric power†	390.00	kw	10,000	3.900	10,500	4.095	7,000	2.730
Gas distribution system†	17.00	ln ft	30,000	0.510	60,000	1.020	40,000	0.680
Incinerator†	7,650.00	each	1	0.008	3	0.023	2	0.015
Roads†	80,000.00	mile	25	2.000	45	3.600	30	2.400
Railroads†	55,000.00	mile	5	0.275	12	0.660	8	0.440
Car parking*	3.00	sq yd	40,000	0.120	60,000	0.180	40,000	0.120
Walks†	6,000.00	mile	10	0.060	18	0.108	12	0.072
Medical facilities*								
Hospital	12,000.00	bed	100	1.200	150	1.800	50	0.600
Dental clinic	17.00	sq ft	5,340	0.091	5,340	0.091	0	0
Dispensary	17.00	sq ft	2,000	0.034	6,000	0.102	4,000	0.068
Flight surgeons' clinic	17.00	sq ft	2,900	0.049	7,500	0.128	5,000	0.085
Storage facilities								
Small arms storage building*	10.00	sq ft	250	0.003	750	0.008	500	0.005
Igloos	18.00	sq ft	63,700	1.146	70,000	1.260	47,000	0.846
Motor pool storage† (covered)	14.00	sq ft	4,000	0.056	6,000	0.084	4,000	0.056
Motor pool storage† (uncovered)	0.37	sq ft	145,000	0.054	225,000	0.083	150,000	0.056
Cold-storage warehouse*	20.00	sq ft	8,400	0.056	13,500	0.270	9,000	0.180
Base warehousing	8.00	sq ft	250,000	2.000	300,000	2.400	200,000	1.600
Covered storage areas	5.00	sq yd	5,500	0.028	12,000	0.060	8,000	0.040
Uncovered storage areas	3.30	sq yd	20,000	0.066	21,000	0.069	14,000	0.046
Salvage area	3.30	sq yd	9,500	0.031	12,000	0.040	8,000	0.026
Flyaway kit storage	10.00	sq ft	5,000	0.050	6,000	0.060	4,000	0.040
Squadron technical supply	9.50	sq ft	12,000	0.114	12,000	0.114	8,000	0.076

* All costs attributable to personnel.

† One-half cost to personnel and one-half to equipment.

Table 5—continued

	Price ($)	Unit	Single-Based Wing		Dispersed Wing—New		Dispersal of Existing Single-Based Wing	
					10 Aircraft per Base		10 Aircraft per Base	
			Requirement	Cost ($ million)	Requirement	Cost ($ million)	Requirement	Cost ($ million)
Storage facilities—continued								
Salvage sheds and bins	4.00	sq ft	3,200	0.013	6,000	0.024	4,000	0.016
Paint and dope storage	13.00	sq ft	3,000	0.039	3,000	0.039	2,000	0.026
Hydrogen and oxygen storage	21.00	sq ft	1,000	0.021	1,500	0.032	1,000	0.021
Lumber storage (open)	3.30	sq yd	5,000	0.017	6,000	0.020	4,000	0.013
Lumber sheds	4.00	sq ft	4,000	0.016	7,500	0.030	5,000	0.020
Squadron supply buildings	9.50	sq ft	11,000	0.105	12,000	0.114	8,000	0.076
AIO warehousing	9.50	sq ft	17,000	0.161	30,000	0.285	20,000	0.190
AIO storage area	8.00	sq yd	16,000	0.128	30,000	0.240	20,000	0.160
Inflammable storage building	12.00	sq ft	1,000	0.012	3,000	0.036	2,000	0.024
Administrative storage*	11.00	sq ft	2,000	0.022	3,000	0.033	2,000	0.022
Shops								
Ordnance	12.50	sq ft	4,000	0.050	6,000	0.075	4,000	0.050
Clothing and equipment repair	10.00	sq ft	3,850	0.039	3,850	0.039	0	0
AIO shops	9.50	sq ft	16,000	0.152	27,000	0.257	18,000	0.171
Automotive maintenance shops	12.50	sq ft	46,500	0.582	60,000	0.750	40,000	0.500
Locomotive shelter and repair shop	15.00	sq ft	3,200	0.048	9,000	0.135	6,000	0.090
Land†	100.00	acre	2,500	0.250	3,600	0.360	2,400	0.240

* All costs attributable to personnel.

† One-half cost to personnel and one-half to equipment.

APPENDIX III

MANPOWER ESTIMATES

Manpower and organization estimates for the dispersed B-36 wing are summarized in Figs. 2 and 3 and in Tables 6 through 21. They were developed from a basic wing structure patterned after the current Strategic Air Command plan given in SAC Regulation 20-15 and from current readiness Personnel Authorization Tables and appropriate Tables of Organization and Equipment.

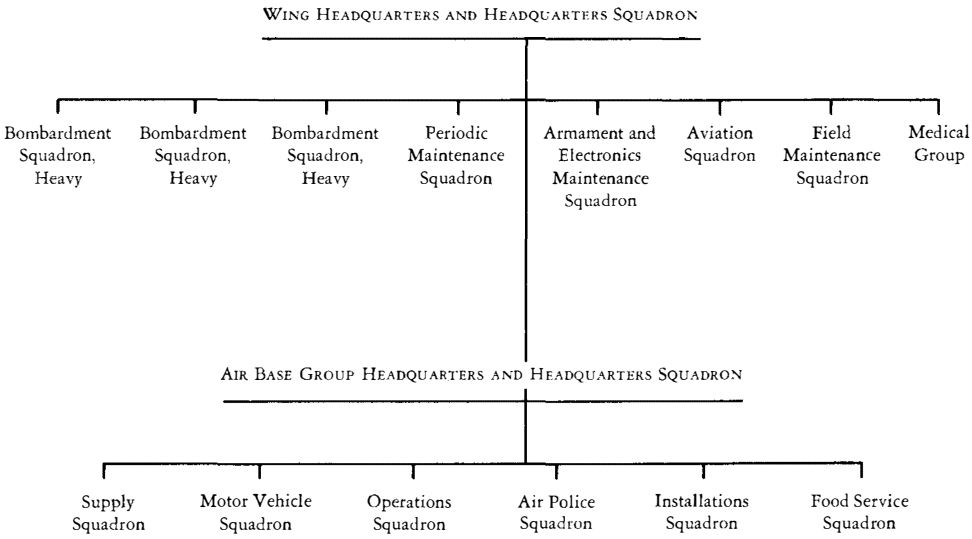

Fig. 2—Organization chart for a single-based B-36 wing

Figure 2 shows the general organizational structure of a heavy-bombardment wing that is located on one base. In Fig. 3, this organization has been modified for dispersal of combat and supporting squadrons to three separate bases, each of which is capable of sustained, self-supported operations independent of the other two bases. Under this concept of operations, each dispersed base has a Wing Headquarters Detachment and all three of these detachments are coordinated by a unit of twenty-four individuals, called Wing Headquarters. The Wing Headquarters Detachments provide sufficient skills and personnel at each station to translate instructions from headquarters higher than the wing into a form which can be absorbed and acted upon by subordinate elements. All other functions of a normal wing have been dispersed

equally. The one exception is the Medical Squadron, which has been rearranged to provide 50-bed hospitals on two bases and a 100-bed hospital on the remaining base.

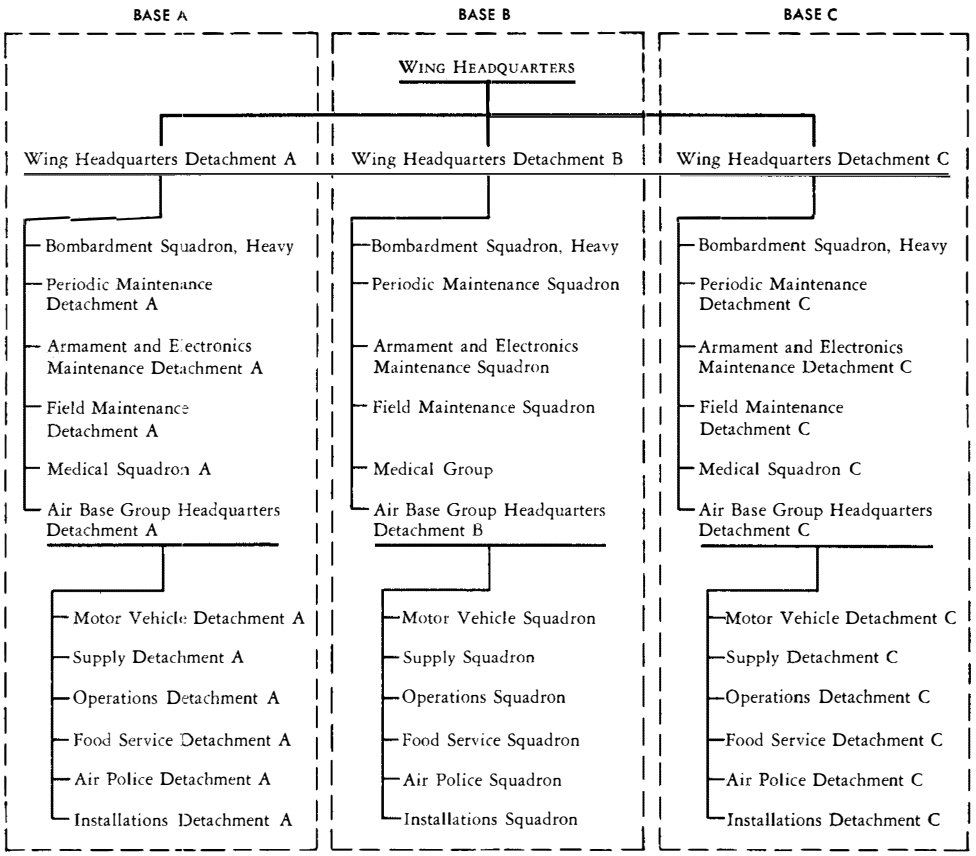

Fig. 3—Organization chart for a dispersed B-36 wing

The operational concept of the dispersed B-36 wing is illustrated by the tabulation on page 33. The tabulation contrasts the reaction within a single-based wing and within a dispersed wing to the same operations order.

Table 6 represents a summary of total manpower strengths by squadrons and detachments of the dispersed wing, and strengths by squadrons of a normal single-based wing.

The manning of the single-based wing was based on current authorization as given by the SAC Manning Program.[13] For the dispersed wing, manpower spaces were first estimated by mechanically dividing every line entry in the

REACTION TO AN OPERATIONS ORDER

Single-Based Wing	*Dispersed Wing*
1. Wing Headquarters accomplishes detailed operational planning, preparation of target materials, briefing, poststrike critique, reporting, etc.	1. Wing Headquarters divides the mission equitably among the squadrons, issuing a fragmentary operations order.
2. Tactical Squadron Headquarters is largely concerned with techniques and training.	2. In the event of destruction of the base on which Wing Headquarters is located, one of the remaining Wing Headquarters Detachments, by prearranged plan, will immediately assume wing command and the operations staff functions summarized in (1).
	3. Tactical Squadron Headquarters receives a copy of the numbered Air Force operations order, and, on the basis of this order and the fragmentary order, accomplishes detailed operational planning, preparation of target materials, briefing, poststrike critique, reporting, etc.

appropriate Personnel Authorization Tables and Tables of Organization and Equipment of the single-based wing by three and rounding to the next highest whole number. By this process each separate base is ensured of receiving the same skills, i.e., AFSC's and SSN's, as on the single-based wing. After consultation and review with manpower officers, these mechanically derived manpower spaces were adjusted where necessary and advisable in order to arrive at operationally feasible authorizations for the dispersed wing.

There is no list of occupations available for the Table of Distribution-Augmentation. However, it can be stated in general that of the 506 T/D-A's recommended by the SAC officers for a single-based wing, 235 are air police. The remaining 271 are various occupations that augment the jobs in all squadrons except the Combat Squadrons. For dispersal, it was recommended that the 271 T/D-A's be increased to 321 and that the 235 air police T/D-A's be increased to 345.

Weather and airways and air communications units have been included to complete the picture of total military manpower required per base. It was recommended that each separate base be assigned units of the same size as those on a single-based wing.

The civilian strength of 300 for a typical single-based wing was recommended

by the SAC manpower officers. They suggested that the civilians be increased to 350 for dispersal and that Base B receive the bulk of this strength.

The manpower worksheets given in Tables 7 through 21 present all occupations and numbers of spaces for the single-based wing as authorized by the appropriate T/O & E's and PAT's. For comparison, the estimates of occupations and numbers of spaces for one separate element of the dispersed wing are given in columns 6 and 7 of each worksheet.

The squadrons and elements of the wing are listed in the worksheets as follows:

Title	Table No.
Wing Headquarters	7
Wing Headquarters and Headquarters Squadron	8
Bombardment Squadrons, Heavy	9
Periodic Maintenance Squadron	10
Armament and Electronics Maintenance Squadron	11
Field Maintenance Squadron	12
Aviation Squadron	13
Medical Group	14
Air Base Group Headquarters and Headquarters Squadron	15
Operations Squadron	16
Supply Squadron	17
Air Police Squadron	18
Installations Squadron	19
Motor Vehicle Squadron	20
Food Service Squadron	21

Table 6

TOTAL MANPOWER AUTHORIZED FOR B-36 WING

Comparison of Single-Based Wing and Three Separately Based Combat Squadrons

Units	Single-Based Wing	Dispersed Wing (Three Bases)			
		Total	Base A	Base B	Base C
Wing Headquarters	....	24	....	24	....
Wing Headquarters Detachments	....	225	75	75	75
Wing Headquarters and Headquarters Squadron	161	....	....	....	....
Bombardment Squadrons, Heavy	993	993	331	331	331
Periodic Maintenance Squadron and Detachments	285	345	115	115	115
Armament and Electronics Maintenance Squadron and Detachments	287	378	126	126	126
Field Maintenance Squadron and Detachments	440	504	168	168	168
Aviation Squadron and Detachments	48	87	29	29	29
Medical Group and Squadrons	172	269	78	113	78
Air Base Group Headquarters and Headquarters Squadron and Detachments	89	132	44	44	44
Operations Squadron and Detachments	146	237	79	79	79
Supply Squadron and Detachments	193	264	88	88	88
Air Police Squadron and Detachments	139	417	139	139	139
Installations Squadron and Detachments	178	363	121	121	121
Motor Vehicle Squadron and Detachments	222	288	96	96	96
Food Service Squadron and Squadrons	207	331	106	119	106
Total of T/O & E's and PAT's	3560	4857	1595	1667	1595
T/D-A Air Police	235	345	115	115	115
T/D-A other	271	321	107	107	107
Total SAC Military	4066	5523	1817	1889	1817
Weather Detachment and Detachments (MATS)	17	51	17	17	17
Airways and Air Communications Detachment and Detachments (MATS)	43	129	43	43	43
Total Base Military	4126	5703	1877	1949	1877
Civilians	300	350	100	150	100
GRAND TOTAL	4426	6053	1977	2099	1977

Table 7

DETAILED MANPOWER WORKSHEET

Wing Headquarters

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding general		0002	..	..	1	1
Personnel						
Director of personnel		2262	..	..	1	1
Senior career guidance specialist	73150	502	..	..	1	..
Operations						
Director of operations		2162	..	..	1	1
Operations officer		2162	..	..	1	1
Operations officer		2161	..	..	1	1
Training officer		2520	..	..	1	1
RCM officer		7888	..	..	1	1
Navigator-radar-bombardier		1037	..	..	1	1
Cruise control		1028	..	..	1	1
Air operations supervisor	27170	791	..	..	1	..
Clerk	70250	405	..	..	1	..
Intelligence						
Photo interpreter		8503	..	..	1	1
Intelligence officer		9301	..	..	1	1
Intelligence operations technician	20470	631	..	..	1	..
Clerk	70250	405	..	..	2	..
Communications						
Communications officer		0205	..	..	1	1
Communications center supervisor	29170	542	..	..	1	..
Materiel						
Director of materiel		4010	..	..	1	1
Supply officer		4902	..	..	1	1
Flight test maintenance officer		4821	..	..	1	1
Administrative supervisor	70270	502	..	..	1	..
Clerk	70250	405	..	..	1	..
TOTAL AUTHORIZATION						
Separate element (Base B only)			..	..	24	15

* Located on Base B.

Table 8

DETAILED MANPOWER WORKSHEET

Wing Headquarters and Headquarters Squadron (PAT 50-2A)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding general		0002	1	1	. . .	. .
Deputy commander		(†)	1	1	1	1
Executive		(†)	1	1	. . .	. .
Aide-de-camp		(†)	1	1	. . .	. .
Senior stenographer	70251	213	1	. .	1	. .
Adjutant general						
Adjutant general		2110	1	1	. . .	. .
Assistant adjutant		2110	1	1	1	1
Clerk	70250	055	1	. .	1	. .
Apprentice clerk	70230	055	1	. .	. . .	. .
Senior clerk	70250	405	2	. .	. . .	. .
Clerk	70250	405	1	. .	. . .	. .
Apprentice clerk	70230	405	1	. .	. . .	. .
Clerk	70250	405	1	. .	1	. .
Administrative supervisor	70270	502	1	. .	1	. .
Wing inspection						
Wing inspector		2162	1	1	. . .	. .
Tactical inspector		2162	1	1	. . .	. .
Administrative inspector		2200	1	1	. . .	. .
Technical inspector		4823	1	1	. . .	. .
Apprentice clerk	70230	405	1	. .	. . .	. .
Administrative supervisor	70270	502	2	. .	. . .	. .
Radar maintenance technician, airborne equipment	30271	542	1	. .	. . .	. .
Aircraft maintenance technician	43171	750	2	. .	. . .	. .
Supply inspection technician	64172	826	1	. .	. . .	. .
Weapons maintenance supervisor	46270	903	1	. .	. . .	. .
Aircraft maintenance technician	43171	925	1	. .	. . .	. .
Radar inspector	30271	955	1	. .	. . .	. .
Vehicle maintenance technician	47171	965	1	. .	. . .	. .
Comptroller						
Comptroller		6305	1	1	1	1
Clerk	70250	405	1	. .	1	. .
Management analysis						
Programs analyst		6320	1	1	1	1
Apprentice clerk	70230	405	1	. .	1	. .

* Titled Wing Headquarters Detachment on each base.

† Use applicable SSN as desired.

Table 8—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Personnel						
Director of personnel		2260	1	1	1	1
Clerk	70250	055	1	..	...	..
Clerk helper	70010	055	1	..	...	..
Clerk	70250	405	1	..	1	..
Personnel supervisor	73270	502	1	..	1	..
Officers section						
Military personnel officer		2200	1	1	...	..
Apprentice clerk	70230	405	1	..	...	..
Apprentice clerk	70230	405	1	..	...	..
Airmen section						
Military personnel officer		2200	1	1	1	1‡
Personnel specialist	73250	405	1	..	1	(‡)
Senior career guidance specialist	73150	502	1	..	...	..
Classification section						
Classification officer		2210	1	1	1	1
Senior career guidance specialist	73150	275	1	..	1	..
Career guidance specialist	73150	275	1	..	...	..
Operations and training						
Director of operations		2162	1	1	...	..
Deputy director of operations		2162	1	1	1	1
Cruise control		1028	1	1	1	1
Navigator-radar-bombardier		1037	3	3	2	2
Operations officer		2162	1	1	...	..
Operations officer		2161	1	1	...	..
Operations officer		2161	2	2	...	..
Gunnery officer		2554	1	1	1	1
Radiological officer		7332	1	1	1	1
RCM officer		7888	1	1	1	1
Special weapons officer		(†)	1	1	1	1
Photo interpreter		8503	2	2	1	1
Clerk helper	70010	055	1	..	1	..
Draftsman	99350	070	1	..	1	..
Apprentice draftsman	99330	070	1	..	1	..
Senior clerk	70250	405	1	..	1	..
Apprentice clerk	70230	405	3	..	...	..
Clerk	70250	405	1	..	1	..
Apprentice clerk	70230	405	1	..	...	..
Administrative supervisor	70270	502	1	..	...	..
Air operations supervisor	27170	791	2	..	...	..
Air operations supervisor	27170	791	1	..	1	..

‡ Authorized for combined Officers and Airmen Section.

Table 8—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Operations and training—continued						
Radiological technician	99570	9870	1	..	1	..
Intelligence						
Intelligence officer		9301	1	1	1	1
Intelligence officer		9301	3	3	...	..
Clerk	70250	405	1	..	1	..
Apprentice clerk	70230	405	1	..	...	..
Clerk	70250	405	1	..	...	..
Intelligence operations technician	20470	631	2	..	1	..
Intelligence operations technician	20470	631	3	..	...	..
Communications						
Communications officer		0200	1	1	1	1
Communications officer		0200	1	1	...	..
Apprentice clerk	70230	405	1	..	1	..
Apprentice clerk	70230	405	1	..	...	..
Communications center supervisor	29170	542	1	..	1	..
Communications center supervisor	29170	542	1	..	...	..
Flying safety						
Flying safety officer		9260	2	2	1	1
Apprentice clerk	70230	405	1	..	...	..
Materiel						
Director of materiel		4010	1	1	...	..
Deputy director of materiel		4010	1	1	1	1
Clerk	70250	055	1	..	...	..
Clerk	70250	405	1	..	1	..
Administrative supervisor	70270	502	1	..	...	..
Supply						
Materiel officer		4010	1	1	1	1
Supply officer		4902	1	1	1	1
Supply officer		4902	1	1	...	..
Clerk	70250	405	1	..	1	..
Organization supply supervisor	64173	821	1	..	1	..
Supply inspection technician	64172	826	2	..	1	..
Senior organization supply technician	64151	821	1	..	...	..
Armament and electronics						
Armament officer		4590	1	1	1	1
Electronics officer		0141	1	1	1	1
Armament systems		4593	1	1	...	..
Apprentice clerk	70230	405	1	..	1	..
Weapons maintenance supervisor	46270	911	1	..	1	..
Radar maintenance technician, airborne equipment	30271	955	1	..	1	..

Table 8—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Materiel—continued						
Maintenance						
Aircraft maintenance technician		4823	1	1	1	1
Apprentice clerk	70230	405	1	..	1	..
Control unit						
Aircraft maintenance		4823	1	1	1	1
Apprentice clerk	70230	055	1	..	...	..
Clerk	70250	405	1	..	...	..
Senior clerk	70250	502	1	..	1	..
Aircraft maintenance technician	43171	925	2	..	2	..
Record unit						
Aircraft maintenance		4823	1	1	1	1**
Clerk	70250	055	1	..	1	..
Clerk	70250	405	1	..	...	..
Supply unit						
Technical supply		4902	1	1	1	1
Supply inspection technician	64172	826	1	..	1	..
Supply inspection technician	64172	826	1	..	...	..
UR unit						
Aircraft maintenance		4823	1	1	...	..
Aircraft maintenance	43171	925	1	..	1	..
Flight test and inspection						
Flight test maintenance		4821	2	2	1	1
Flight engineer		1028	1	1	...	..
Aircraft maintenance supervisor	43170	750	5	..	2	..
Munitions disposal technician	46171	903	1	..	...	..
Weapons maintenance supervisor	46270	903	1	..	1	..
Aircraft maintenance technician	43171	925	3	..	1	..
Radar maintenance technician, airborne equipment	30271	955	3	..	1	..
Radar maintenance technician, airborne equipment	30271	955	1	..	1	..
Radar maintenance technician, airborne equipment	30271	955	1	..	...	..
Senior aircraft radio operator	29350	2156	1	..	...	..
Headquarters Squadron						
Squadron commander		2120	1	1	1	1
Clerk helper	70010	055	1	..	1	..
Senior clerk	70250	405	1	..	...	..
Apprentice clerk	70250	405	2	..	...	..
First sergeant	99970	502	1	..	1	..

** Authorized for combined Record Unit and UR.

Table 8—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element* of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Headquarters Squadron—continued						
Senior organization supply supervisor	64151	821	1	..	1	..
Apprentice organization supply specialist	64131	835	1	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	75	30
Total wing (three separate elements)			161	57	225	90

Table 9

DETAILED MANPOWER WORKSHEET

Bombardment Squadrons, Heavy (PAT 70-6A)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 3 Squadrons, 30 Aircraft		Separate Squadron of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		1095	3	3	1	1
First sergeant	99970	(*)	3	...	1	...
Personnel						
Adjutant		2110	3	3	1	1
Apprentice clerk	70230		3	...	1	...
Career guidance specialist	73150		3	...	1	...
Assistant career guidance specialist	73130		3	...	1	...
Senior personnel specialist	73250		3	...	1	...
Personnel specialist	73250		3	...	1	...
Assistant personnel specialist	73230		3	...	1	...
Operations and training						
Communications officer		0205	3	3	1	1
Flight engineer		1028	3	3	1	1
Navigator-bombardier		1037	6	6	2	2
Survival training and equipment officer		1042	3	3	1	1
Operations		2162	3	3	1	1
Radar observer, ECM		7888	3	3	1	1
Intelligence		9301	3	3	1	1
Clerk	70250		3	...	1	...
Draftsman	99350		3	...	1	...
Clerk	70250		3	...	1	...
Apprentice clerk	70230		3	...	1	...
Organization supply specialist	64151		6	...	2	...
Apprentice organization supply specialist	64131		3	...	1	...
Parachute rigger	58150		3	...	1	...
Intelligence operations technician	20470		3	...	1	...
Senior intelligence operations specialist	20470		3	...	1	...
Air operations supervisor	27170		3	...	1	...
Combat crews						
Flight engineer		1028	60	60	20	20
Navigator-bombardier		1037	120	120	40	40

* Airmen SSN's not given.

Table 9—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 3 Squadrons, 30 Aircraft		Separate Squadron of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Combat crews—continued						
Pilot, six-engine		1095	90	90	30	30
Senior turret systems mechanic-gunner, B-36	32351A		30	...	10	...
Senior turret systems mechanic-gunner, B-36	32351A		60	...	20	...
Senior aircraft electronics-gunner	43155		30	...	10	...
Flight engineer technician	43271		(63)	...	(21)	...
Senior gun laying systems mechanic-gunner, B-36	3241B		30	...	10	...
Senior aircraft radio operator	29350		60	...	20	...
Engineering						
Aircraft maintenance officer		4823	3	3	1	1
Senior automotive mechanic	47151		3	...	1	...
Automotive mechanic	47151		3	...	1	...
Apprentice automotive mechanic	47131		3	...	1	...
Senior construction equipment operator	55151		3	...	1	...
Construction equipment operator	55131		3	...	1	...
Apprentice clerk	70230		3	...	1	...
Senior aircraft reciprocating engine mechanic	43152		30	...	10	...
Aircraft reciprocating engine mechanic	43152		30	...	10	...
Apprentice aircraft reciprocating engine mechanic	43152		30	...	10	...
Senior aircraft jet engine mechanic	43153		6	...	2	...
Aircraft jet engine mechanic	43133		9	...	3	...
Aircraft jet engine mechanic	43133		15	...	5	...
Senior aircraft mechanic	43151		54	...	18	...
Aircraft mechanic	43151		54	...	18	...
Apprentice aircraft mechanic	43151		102	...	34	...
Aircraft maintenance supervisor (crew chief)	43170		30	...	10	...
Aircraft maintenance supervisor (line chief)	43170		3	...	1	...
Aircraft maintenance supervisor (flight chief)	43170		9	...	3	...
Senior vehicle operator	60350		3	...	1	...
Vehicle operator	60350		6	...	2	...

Table 9—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 3 Squadrons, 30 Aircraft		Separate Squadron of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Supply						
Squadron supply		4902	3	3	1	1
Apprentice woodworker	55230		3	...	1	...
Clerk	70250		3	...	1	...
Senior organization supply specialist	64151		3	...	1	...
Organization supply supervisor	64173		3	...	1	...
Organization supply specialist	64151		3	...	1	...
Apprentice organization supply specialist	64131		6	...	2	...
Supply helper	64010		3	...	1	...
TOTAL AUTHORIZATION						
Separate squadron			...	...	331	102
Total wing (three squadrons)			993	306	993	306

Table 10

DETAILED MANPOWER WORKSHEET

Periodic Maintenance Squadron (PAT 80-7A)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		4823	1	1	1	1
First sergeant	99970		1	..	1	..
Personnel						
Personnel (adjutant)		2200	1	1	1	1
Personnel specialist	73250	405	2	..	1	..
Assistant personnel specialist	73230	405	2	..	1	..
Engineering						
Aircraft maintenance officer		4823	2	2	1	1
Automotive mechanic	47151	166	2	..	1	..
Apprentice automotive mechanic	47131	166	1	..	1	..
Clerk	70250	405	2	..	2	..
Senior aircraft reciprocating engine mechanic	43152	684A	15	..	6	..
Aircraft reciprocating engine mechanic	43152	684A	15	..	6	..
Apprentice aircraft reciprocating engine mechanic	43132	684A	60	..	20	..
Senior aircraft jet engine mechanic	43153	684C	15	..	6	..
Aircraft jet engine mechanic	43133	684C	33	..	15	..
Senior aircraft electrician	43154	685	5	..	2	..
Aircraft electrician	43134	685	5	..	2	..
Senior aircraft mechanic	43151	747F	27	..	10	..
Aircraft mechanic	43151	747F	27	..	10	..
Apprentice aircraft mechanic	43131	747F	54	..	20	..
Aircraft maintenance technician (dock chief)	43171	750F	5	..	2	..
Aircraft maintenance technician (dockline chief)	43171	750F	1	..	1	..
Aircraft maintenance technician (assistant dockline chief)	43171	750F	1	..	1	..
Supply						
Senior organization supply specialist	64151	826	2	..	1	..
Organization supply specialist	64151	835	2	..	1	..
Apprentice organization supply specialist	64131	835	2	..	1	..
Supply helper	64010	835	2	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	115	3
Total wing (three separate elements)			285	4	345	9

Table 11

DETAILED MANPOWER WORKSHEET

Armament and Electronics Maintenance Squadron (PAT 90-7A)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		4593	(*)	(*)	(*)	(*)
First sergeant	99970	502	(*)	..	(*)	..
Personnel						
Personnel (adjutant)		2200	1	1	1	1
Personnel specialist	73250	405	1	..	1	..
Clerk	73250	405	1	..	1	..
Assistant personnel specialist	70230	405	1	..	1	..
Apprentice clerk	70230	405	2	..	1	..
Armament and electronics maintenance						
Supervision						
Electronics officer		0141	1	1	1	1
Armament systems officer		4593	2	2	1	1
Clerk	70250	405	1	..	1	..
Apprentice clerk	70230	405	1	..	1	..
Automotive mechanic	47151	166	1	..	1	..
Apprentice automotive mechanic	47131	166	2	..	1	..
Radar maintenance supervisor, airborne equipment	30270	955	1	..	1	..
A B C maintenance						
Radiological officer		7332	1	1	1	1
Radiological technician	99570	9870	1	..	1	..
Radio						
Radio maintenance supervisor, airborne equipment	30170	647	1	..	1	..
Senior radio mechanic, airborne equipment	30150	647	10	..	4	..
Radio maintenance supervisor, airborne equipment	30170	754	3	..	1	..
Senior radio mechanic, airborne equipment	30150	754	11	..	4	..
Apprentice radio mechanic, airborne equipment	30130	754	9	..	3	..
Bomb system						
Armament systems officer		4593	1	1	1	1
Electronics officer		0141	1	1	1	1
K series systems technician	32171E	574A	3	..	1	..

* Assumed by senior officer and airmen assigned.

Table 11—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Armament and electronics—continued						
Bomb system—continued						
Senior K series stabilization optic specialist	32150B	574A	2	..	1	..
K series systems technician	32171E	574	1	..	1	..
K series systems mechanic	32150E	574	2	..	1	..
Apprentice K series systems mechanic	32130E	574	2	..	1	..
Senior K series systems mechanic	32150E	867C	30	..	10	..
Weapons mechanic	46250	911	8	..	3	..
Apprentice weapons mechanic	46230	911	8	..	3	..
Munitions weapons maintenance mechanic	46010	911	10	..	4	..
K series systems technician	32171E	955D	13	..	5	..
K series systems technician	32171E	955E	3	..	1	..
K series systems technician	32171E	955F	3	..	1	..
Bombardier-navigator systems supervisor	32170	955B	1	..	1	..
Senior K series computer specialist	32150D	955E	2	..	1	..
K series systems technician	32171E	955F	1	..	1	..
Senior K series radar/intercom.	32150C	955F	1	..	1	..
Gunnery systems						
Armament systems officer		4593	1	1	1	1
Turret systems supervisor	32370	575	1	..	1	..
Turret systems technician B-36	32371A	575	1	..	1	..
Senior turret systems mechanic B-36	32350A	575	6	..	2	..
Senior gun laying mechanic B-36	32350B	867F	15	..	5	..
Gun laying systems mechanic B-36	32350B	867F	15	..	5	..
Weapons mechanic	46250	911	1	..	1	..
Apprentice weapons mechanic	46230	911	1	..	1	..
Munitions weapons mechanic	46010	911	5	..	2	..
Senior turret systems mechanic B-36	32350A	960	30	..	10	..
Apprentice turret systems mechanic B-36	32330A	960	15	..	5	..
Turret systems technician B-36	32371A	955J	2	..	1	..
Senior gun laying systems mechanic	32350A	955J	1	..	1	..
ECM and general radar						
Electronics officer		0141	1	1	1	1
Senior radar machanic, airborne equipment	30250	867	4	..	2	..

Table 11—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Armament and Electronics—continued						
ECM and general radar—continued						
Radar maintenance supervisor, airborne equipment	30270	955	1	..	1	..
Radar maintenance technician, airborne equipment	30271	955	2	..	1	..
Senior radar mechanic, airborne equipment	30250	955	4	..	2	..
Weapons maintenance						
Weapons maintenance supervisor	46270	903	1	..	1	..
Senior weapons mechanic	46250	903	7	..	3	..
Apprentice weapons mechanic	46230	903	3	..	1	..
Camera repair						
Senior camera repairman	40350	941	11	..	4	..
Apprentice camera repairman	40330	941	7	..	3	..
Supply						
Apprentice clerk	70230	405	1	..	1	..
Senior munitions specialist	46150	505	3	..	1	..
Senior organization supply specialist	64151	826	1	..	1	..
Organization supply specialist	64151	835	1	..	1	..
Apprentice organization supply specialist	64131	835	2	..	1	..
Supply helper	64010	835	1	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	126	8
Total wing (three separate elements)			287	9	378	24

Table 12

DETAILED MANPOWER WORKSHEET

Field Maintenance Squadron (PAT 100-7)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		4823	1	1	1	1
First sergeant	99970	502	1	..	1	..
Personnel						
Adjutant		2110	1	1	1	1
Military personnel		2200	1	1	...	..
Apprentice clerk	70230	055	1	..	1	..
Career guidance specialist	73150	275	1	..	1	..
Senior clerk	70250	405	1	..	1	..
Clerk	70250	405	1	..	1	..
Personnel specialist	73250	405	1	..	1	..
Personnel supervisor	73270	502	1	..	1	..
Maintenance supervisor						
Aircraft maintenance		4823	2	2	1	1
Clerk	70250	055	1	..	1	..
Draftsman	99350	070	1	..	1	..
Clerk	70250	405	1	..	1	..
Apprentice clerk	70230	405	2	..	1	..
Senior clerk	70250	502	1	..	1	..
Engine build-up						
Senior airframe repairman	53450	555	2	..	1	..
Airframe repairman	53450	555	2	..	1	..
Apprentice airframe repairman	53450	555	2	..	...	..
Aircraft maintenance technician	43171	684A	2	..	1	..
Senior aircraft reciprocating engine mechanic	43152	684A	17	..	6	..
Aircraft reciprocating engine mechanic	43152	684A	18	..	6	..
Apprentice aircraft reciprocating engine mechanic	43132	684A	18	..	6	..
Aircraft jet engine overhaul supervisor	43372	684C	1	..	1	..
Aircraft jet engine overhaul technician	43373	684C	1	..	1	..
Senior aircraft jet engine overhaul repairman	43352	684C	2	..	1	..
Aircraft jet engine repairman	43352	684C	1	..	...	..
Aircraft maintenance technician	43171	684C	1	..	1	..
Senior aircraft jet engine mechanic	43153	684C	3	..	1	..
Aircraft jet engine mechanic	43133	684C	4	..	1	..

Table 12—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Engine build-up—continued						
Apprentice aircraft jet engine mechanic	43133	684C	4	..	1	..
Senior aircraft electrician	43154	685	1	..	1	..
Aircraft electrician	43134	685	1	..	...	..
Senior aircraft mechanic	43151	747F	4	..	2	..
Aircraft mechanic	43151	747F	5	..	2	..
Apprentice aircraft mechanic	43131	747F	9	..	2	..
Aircraft jet engine overhaul technician	43373	925	1	..	1	..
Aircraft jet engine overhaul supervisor	43372	925	2	..	...	..
Dope, fabric, and paint						
Senior fabric and leather worker	58151	548	4	..	1	..
Fabric and leather worker	58151	548	2	..	...	..
Apprentice painter	55231	548	2	..	1	..
Fabric, leather, and rubber helper	58010	548	1	..	1	..
Machine						
Machine shop supervisor	53170	114	1	..	1	..
Senior machinist	53150	114	1	..	...	..
Machinist	53150	114	2	..	1	..
Apprentice machinist	53130	114	2	..	...	..
Office machine mechanic	40150	282	1	..	...	..
Apprentice office machine mechanic	40130	282	1	..	1	..
Sheet metal						
Airframe repairman supervisor	53470	555	1	..	1	..
Airframe repairman technician	53471	555	2	..	1	..
Senior airframe repairman	53450	555	6	..	1	..
Airframe repairman	53450	555	24	..	8	..
Apprentice airframe repairman	53450	555	23	..	8	..
Welding						
Metal-processing supervisor	53270	573	1	..	...	..
Senior metal-processing specialist	53250	573	1	..	1	..
Metal-processing specialist	53250	573	2	..	1	..
Apprentice metal-processing specialist	53230	573	2	..	...	..
Woodworking						
Senior woodworker	55250	550	1	..	1	..
Woodworker	55250	550	1	..	...	..
Apprentice woodworker	55230	550	1	..	1	..
Aero repair and reclamation						
Aircraft maintenance		4823	3	3	1	1
Senior automotive mechanic	47151	166	1	..	1	..
Automotive mechanic	47151	166	2	..	...	..

Table 12—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Engine build-up—continued						
Aero repair, reclamation—continued						
Apprentice automotive mechanic	47131	166	2	..	1	..
Senior construction equipment operator	55151	359C	1	..	1	..
Construction equipment operator	55131	359C	3	..	1	..
Aircraft engine maintenance helper	43010	590	5	..	2	..
Senior aircraft reciprocating engine mechanic	43152	684A	1	..	1	..
Aircraft reciprocating engine mechanic	43152	684A	2	..	1	..
Apprentice aircraft reciprocating engine mechanic	43132	684A	2	..	...	..
Senior aircraft mechanic	43151	747F	7	..	3	..
Aircraft mechanic	43151	747F	6	..	1	..
Apprentice aircraft mechanic	43131	747F	11	..	4	..
Aircraft maintenance technician	43171	925	3	..	1	..
Aircraft maintenance supervisor	43170	925	1	..	1	..
Senior vehicle operator	60350	932	1	..	1	..
Vehicle operator	60350	932	3	..	1	..
Electrical						
Senior aircraft electrician	43154	685	16	..	6	..
Senior aircraft electrician	43154	685	2	..	...	..
Aircraft electrician	43134	685	39	..	13	..
Aircraft electrical accessory supervisor	42670	958	1	..	1	..
Senior aircraft electrical accessory repairman	42650	958	1	..	...	..
Aircraft electrical accessory repairman	42650	958	2	..	1	..
Apprentice aircraft electrical accessory repairman	42630	958	2	..	...	..
Hydraulic						
Aircraft hydraulic supervisor	42570	528	1	..	1	..
Senior aircraft hydraulic mechanic	42550	528	4	..	2	..
Aircraft hydraulic mechanic	42550	528	5	..	...	..
Apprentice aircraft hydraulic mechanic	42530	528	5	..	2	..
Instrument						
Senior watch and clock repairman	40451	381	1	..	1	..
Senior aircraft instrument mechanic	43156	686	5	..	2	..
Aircraft instrument mechanic	43136	686	6	..	2	..
Instrument overhaul supervisor	40470	957	1	..	1	..

Table 12—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Engine build-up—continued						
Instrument—continued						
Senior electrical instrument repairman	40453	957	10	..	4	..
Electrical instrument repairman	40453	957	11	..	2	..
Apprentice electrical instrument repairman	40433	957	8	..	3	..
Parachute, leather, rubber, and textile						
Fabric, leather worker	58151	609	1	..	1	..
Apprentice fabric, leather worker	58131	609	1	..	...	..
Parachute and fabric supervisor	58170	620	1	..	1	..
Senior parachute rigger	58150	620	1	..	...	..
Parachute rigger	58150	620	2	..	...	..
Apprentice parachute rigger	58130	620	4	..	2	..
Senior rubber-products repairman	58250	665	1	..	...	..
Rubber-products repairman	58250	665	1	..	1	..
Propeller						
Aircraft propeller supervisor	42370	687	1	..	1	..
Senior aircraft propeller mechanic	42350	687	11	..	3	..
Aircraft propeller mechanic	42350	687	12	..	4	..
Apprentice aircraft propeller mechanic	42330	687	14	..	5	..
Supply						
Squadron supply		4902	2	2	1	1
Organization supply specialist	64151	242	1	..	1	..
Apprentice organization supply specialist	64131	242	2	..	1	..
Apprentice clerk	70230	405	1	..	...	..
Senior organization supply specialist	64151	821	1	..	1	..
Organization supply supervisor	64173	826	1	..	1	..
Senior organization supply specialist	64151	826	3	..	1	..
Organization supply specialist	64151	835	2	..	1	..
Apprentice organization supply specialist	64131	835	1	..	...	..
Supply helper	64010	835	1	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	168	5
Total wing (three separate elements)			440	10	504	15

Table 13

DETAILED MANPOWER WORKSHEET
Aviation Squadron (T/O & E 1-2613)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Section One						
Commanding officer		4592	1	1	1	1
Executive officer		4592	1	1	..	..
Intelligence operations technician	20470		1	..	1	..
Apprentice clerk	70230		1	..	..	..
Senior clerk	70250		2	..	1	..
First sergeant	99970		1	..	1	..
Section Two						
Armament weapons officer		4592	2	2	1	1
Electrical and refrigeration supervisor	56170		1	1	1	1
Weapons mechanism technician	33270		1	..	1	..
Section Three						
Physicist		7312	3	3	1	1
Section Four						
Armament systems officer		4593	1	..	1	1
Research and development officer, specialist		7050	2	2	1	1
Weapons mechanism technician	33270		6	..	1	..
Section Five						
Commanding officer		0205	4	..	1	1
Electronics officer, air		0141	1	1	..	..
Research and development officer, specialist		7050	4	4	1	1
Weapons electrical technician	33170		5	..	..	1
Section Six						
Section Seven						
Communications supply officer		4400	2	1	1	1
Armament systems officer		4593	1	1	1	1
Weapons electrical technician	33170		1	..	1	..
Electrician	56150		1	..	1	..
Refrigeration specialist	56151		1	..	..	..
Electrical and refrigeration supervisor	56170		1	..	1	..
Senior organization supply specialist	64151		1	..	1	..
Organization supply specialist	64151		1	..	..	..
Organization supply supervisor	64173		1	..	..	..
Clerk	70250		1	..	..	..
TOTAL AUTHORIZATION						
Separate element for each base			..	..	20	10
Total wing (three separate elements)			48	22	60	30

Table 14

DETAILED MANPOWER WORKSHEET
Medical Group (T/O & E 1-9022T)

	SSN	T/O & E and PAT Authorizations					
		Single-Based Wing of 30 Aircraft—50 Beds*		Base B Element of 10 Aircraft—100 Beds†		Bases A and C Elements of 10 Aircraft Each—50 Beds‡	
		Total Military	Officers	Total Military	Officers	Total Military	Officers
Officers							
Adjutant	2110	1	1	1	1	1	1
Registrar	2431	1	1	1	1	...	..
Opthalmologist	3106	1	1	1	1	...	..
Internist	3139	1	1	1	1	1	1
Medical officer, general surgeon	3150	1	1	1	1	1	1
Deputy CO (flight surgeon)	3162	1	1	1	1	...	..
Flight surgeon	3162	3	3	1	1	1	1
Dental	3170	4	4	3	3	2	2
Oral surgeon	3171	1	1	...	..	...	..
Prosthodontist	3175	1	1	...	..	...	..
Meat and dairy products inspector	3221	1	1	1	1	1	1
Radiologist	3306	1	1	...	..	...	..
Nurse, administrative	3430	1	1	1	1	1	1
Nurse, operating room	3443	1	1	1	1	1	1
Nurse, anesthetist	3445	1	1	1	1	...	..
Nurse, general duty	3449	12	12	7	7	4	4
Commanding officer (flight surgeon)	3500	1	1	1	1	...	..
Medical supply	4490	1	1	1	1	1	1
Sanitary engineer	7960	1	1	1	1	...	..
Enlisted							
Baker	017	1	..	1	..	1	..
Meat cutter	037	1	..	1	..	1	..
Clerk (mail)	055	4	..	2	..	2	..
Cook, first	060	5	..	4	..	2	..
Cook, second	060	4	..	3	..	2	..
Food service attendant	062	9	..	6	..	4	..
Dental laboratory technician	067	1	..	1	..	1	..
Physical therapy technician	072	1	..	1	..	...	..
Meat or dairy inspector	120	1	..	1	..	1	..
Powerman	166	1	..	1	..	1	..

* 1 times columns 7, 9, and 10 and 3 times column 8 in the T/O & E.

† 1 times columns 6, 8, 9, and 10 in the T/O & E (for Base B only).

‡ 1 times columns 5, 8, and 10 in the T/O & E (for Bases A and C).

Table 14—continued

	SSN	T/O & E and PAT Authorizations					
		Single-Based Wing of 30 Aircraft—50 Beds*		Base B Element of 10 Aircraft—100 Beds†		Bases A and C Elements of 10 Aircraft Each—50 Beds‡	
		Total Military	Officers	Total Military	Officers	Total Military	Officers
Enlisted—continued							
Sanitary technician	196	2	..	1	..	1	..
Stenographer	213	1	..	1	..	1	..
Medical equipment maintenance technician	229	1	..	1	..	...	..
Radiology technician	264	3	..	3	..	2	..
Classification specialist (clerk-typist)	275	1	..	1	..	1	..
Medical radiological laboratory technician	313	4	..	2	..	1	..
Ambulance driver	345	6	..	5	..	4	..
Clerk-typist	405	6	..	6	..	5	..
Medical technician	409	16	..	7	..	5	..
Medical corpsman	657	28	..	16	..	11	..
Medical administration specialist	673	5	..	2	..	1	..
Supply sergeant	821	1	..	1	..	1	..
Food service steward	824	1	..	1	..	1	..
Assistant food service steward	824	1	..	1	..	...	..
Medical supply technician	825	1	..	1	..	1	..
Supply clerk	835	3	..	2	..	2	..
Dental assistant	855	8	..	5	..	3	..
Medical laboratory technician	858	4	..	3	..	2	..
Pharmacy technician	859	1	..	1	..	1	..
Chief surgical technician	861	1	..	1	..	1	..
Surgical technician	861	11	..	5	..	5	..
Aeromedical technician	9409	4	..	2	..	1	..
TOTAL AUTHORIZATION							
Separate element		...	..	113	24	78	15
Total wing		172	35			269	54

Table 15

DETAILED MANPOWER WORKSHEET
Air Base Group Headquarters and Headquarters Squadron (PAT 60-1A)*

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		2120	1	1	1	1
Executive		2120	1	1	1	1
Adjutant						
Adjutant		2110	1	1	1	1
Assistant adjutant		2110	1	1	. . .	. .
Senior clerk	70250	055	1	. .	1	. .
Clerk helper	70010	055	2	. .	1	. .
Senior clerk	70250	405	1	. .	. . .	. .
Senior clerk	70250	405	1	. .	. . .	. .
Apprentice clerk	70230	405	1	. .	1	. .
Apprentice clerk	70230	405	1	. .	. . .	. .
Personnel supervisor	73270	502	1	. .	. . .	. .
Administrative supervisor	70270	667	1	. .	1	. .
Historical technician	72171		. .	. .	1	. .
Duplicating devices operator	72150		. .	. .	1	. .
Public information						
Public information officer		5401	1	1	1	1
Information specialist	72130	274	1	. .	. . .	. .
Provost marshal						
Provost marshal		9100	1	1	1	1
Air police supervisor	96170	677	1	. .	. . .	. .
Legal and claims						
Legal officer		8101	1	1	1	1
Senior legal officer		8103	1	1	. . .	. .
Senior clerk	70250	279	1	. .	1	. .
Senior clerk	70250	279	1	. .	. . .	. .
Apprentice clerk	70230	405	2	. .	. . .	. .
Personnel						
Group personnel officer		2200	1	1	1	1
Assistant group personnel officer		2200	1	1	. . .	. .
Apprentice clerk	70230	055	1	. .	1	. .
Senior career guidance specialist	73150	275	1	. .	. . .	. .
Senior career guidance specialist	73150	275	1	. .	1	. .
Senior personnel specialist	73250	405	1	. .	. . .	. .
Senior personnel specialist	73250	405	1	. .	. . .	. .
Senior personnel specialist	73250	405	1	. .	1	. .

* Titled Air Base Headquarters Detachment on each base.

Table 15—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Personnel—continued						
Apprentice clerk	70230	405	2	..	...	..
Personnel supervisor	73270	502	1	..	1	..
Chaplain						
Chaplain		5310	3	3	1	1
Senior welfare specialist	79150	534	1	..	1	..
Senior welfare specialist	79150	534	1	..	...	..
Apprentice welfare specialist	79130	534	1	..	...	..
Ground safety						
Ground safety specialist	73130	486	2	..	1	..
Personnel affairs						
Special services officer		5000	1	1	1	1
Information and education officer		5004	1	1	...	..
Apprentice clerk	70230	055	1	..	1	..
Clerk helper	70010	055	1	..	...	..
Senior recreation specialist	77251	442	1	..	...	..
Materiel						
Group S-4		4902	1	1	1	1
Organization supply supervisor	64173	821	1	..	1	..
Senior organization supply supervisor	64151	821	1	..	...	..
Organization supply supervisor	64173	826	1	..	...	..
Transportation						
Transportation officer		0613	1	1	1	1
Senior clerk	70250	405	1	..	1	..
Vehicle maintenance technician	47171	965	1	..	...	..
Post exchange						
Apprentice clerk	70230	055	1	..	...	..
Base comptroller						
Accounting and disbursing						
Finance and disbursing officer		6201	2	2	1	1
Bookkeeping technician	81210	268	1	..	1	..
Budget and fiscal supervisor	81170	268	1	..	1	..
Senior disbursing clerk	81250	268	1	..	...	..
Senior clerk	70250	405	1	..	1	..
Disbursing supervisor	81270	622	2	..	...	..
Senior disbursing clerk	81250	622	1	..	...	..
Disbursing clerk	81230	622	1	..	...	..
Apprentice clerk	70230	622	2	..	1	..
Disbursing clerk	81230	623	1	..	1	..

Table 15—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Base comptroller—continued						
Accounting, disbursing—continued						
Apprentice clerk	70230	623	1	..	...	..
Cost analysis technician	81370	9268	1	..	1	..
Reporting						
Statistical officer		6402	2	2	1	1
Senior draftsman	99350	070	1	..	1	..
Apprentice draftsman	99330	070	1	..	...	..
Statistical services supervisor	83170	212	1	..	1	..
Senior statistical specialist	83150	212	1	..	1	..
Senior statistical specialist	83150	212	2	..	...	..
Senior clerk	70250	405	1	..	1	..
Squadron headquarters						
Squadron commander		2120	1	1	1	1
Apprentice clerk	70230	055	1	..	1	..
Senior clerk	70250	056	1	..	1	..
Apprentice clerk	70230	056	1	..	...	..
Senior career guidance specialist	73150	275	1	..	1	..
Senior career guidance specialist	73150	275	1	..	...	..
Senior clerk	70250	405	1	..	...	..
First sergeant	99970	502	1	..	1	..
Senior organization supply specialist	64151	821	1	..	...	..
Apprentice organization supply specialist	64131	835	1	..	...	..
TOTAL AUTHORIZATION						
Separate element for each base			..	..	44	14
Total wing (three separate elements)			89	22	132	42

Table 16

DETAILED MANPOWER WORKSHEET
Operations Squadron (PAT 120-1A)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		2162	1	1	1	1
First sergeant	99970	502	1	. .	1	. .
Personnel						
Adjutant (unit supply, 4902)		2110	1	1	1	1
Apprentice clerk (mail)	70230	055	1	. .	1	. .
Career guidance specialist	73150	275	1	. .	1	. .
Personnel specialist	73250	405	2	. .	1	. .
Apprentice clerk	70230	405	1	. .	1	. .
Unit supply						
Senior organization supply specialist	64151	821	1	. .	1	. .
Apprentice organization supply specialist	64131	835	1	. .	1	. .
Base and transient aircraft maintenance flight						
Aircraft maintenance (technician supervisor, 4902)		4823	1	1	1	1
Senior automotive mechanic	47151	166	1	. .	. . .	. .
Automotive mechanic	47151	166	1	. .	1	. .
Clerk	70250	405	1	. .	1	. .
Senior aircraft mechanic	43151	747C	4	. .	2	. .
Aircraft mechanic	43151	747C	4	. .	. . .	. .
Apprentice aircraft mechanic	43131	747C	8	. .	3	. .
Senior aircraft mechanic	43151	750I	2	. .	. . .	. .
Aircraft maintenance technician	43171	750I	1	. .	1	. .
Radio mechanic, airborne equipment	30150	754	1	. .	1	. .
Senior organization supply specialist	64151	826	1	. .	1	. .
Flight mechanic technician	43260	2747	4	. .	2	. .
Senior aircraft radio operator	29350	2756	2	. .	. . .	. .
Base operations flight						
Base operations		2161	2	2	2	2
Clerk	70250	055	1	. .	1	. .
Apprentice vehicle operator	60330	345	1	. .	1	. .
Clerk	70250	405	1	. .	. . .	. .
Apprentice clerk	70230	405	1	. .	1	. .
Organization supply specialist	64151	594	1	. .	1	. .
Apprentice organization supply specialist	64131	594	1	. .	. . .	. .

Table 16—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Base operations flight—continued						
Air traffic operations supervisor	27170	791	2	..	1	..
Senior air operations specialist	27150	791	2	..	2	..
Air operations specialist	27150	791	1	..	1	..
Communications flight						
Communications		0200	1	1	1	1
Communications and electronics (message center cryptographer)		0200	2	2	1	1
Communications and electronics (wire)		0200	1	1	1	1
Communications and electronics (radio)		0200	1	1	1	1
Installer cableman	36150	039	1	..	1	..
Senior installer cableman	36150	097	1	..	1	..
Installer cableman	36150	097	1	..	1	..
Apprentice installer cableman	36130	097	2	..	1	..
Senior electrician	56150	166	1	..	1	..
Electrician	56150	166	1	..	1	..
Senior communications center specialist	29150	237	2	..	1	..
Communications center specialist	29150	237	3	..	1	..
Apprentice communications center specialist	29130	237	2	..	1	..
Installer cableman	36150	238	1	..	...	..
Apprentice installer cableman	36130	238	1	..	1	..
Senior communications machine repairman	36350	239	1	..	1	..
Communications machine repairman	36350	239	1	..	...	..
Apprentice communications machine repairman	36330	239	1	..	1	..
Senior clerk	70250	405	1	..	1	..
Clerk	70250	405	1	..	...	..
Apprentice clerk	70230	405	1	..	1	..
Wire maintenance supervisor, inside	36270	542	1	..	1	..
Communications center supervisor	29170	542	1	..	1	..
Radio maintenance supervisor, ground equipment	30172	542	1	..	1	..
Organization supply supervisor	64173	581	1	..	1	..
Wire maintenance supervisor, inside	36270	646	1	..	1	..
Senior central office equipment mechanic	36250	646	1	..	...	..
Central office equipment mechanic	36250	646	1	..	1	..

Table 16—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Communications flight—continued						
Senior radio mechanic, ground equipment	30151	648	2	..	1	..
Radio mechanic, ground equipment	30151	648	2	..	1	..
Communications center specialist	29150	650	2	..	1	..
Apprentice communications center specialist	29130	650	2	..	1	..
Communications operator's helper	29010	650	3	..	1	..
Senior communications center specialist	29150	667	1	..	...	..
Communications center specialist	29150	667	2	..	....	..
Apprentice communications center specialist	29130	667	2	..	...	..
Senior ground radio operator	29351	766	5	..	1	..
Ground radio operator	29351	766	5	..	2	..
Apprentice ground radio operator	29331	766	8	..	3	..
Senior radio mechanic, ground equipment	30151	792	1	..	...	..
Radio mechanic, ground equipment	30151	792	1	..	1	..
Senior cryptographic operator	29250	805	1	..	1	..
Cryptographic operator	29250	805	2	..	1	..
Apprentice cryptographic operator	29230	805	6	..	2	..
Photographic laboratory flight						
Photographic		8502	1	1	1	..
Draftsman	99350	070	1	..	1	..
Apprentice motion picture specialist	23331	137	1	..	...	..
Apprentice camera repairman	40330	941	1	..	1	..
Photographic supervisor	23270	945	1	..	1	..
Senior photographer	23250	945	1	..	...	..
Photographer	23250	945	1	..	1	..
Apprentice photographer	23230	945	3	..	1	..
Photographic helper	23010	945	3	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	79	9
Total wing (three separate elements)			146	11	237	27

Table 17

DETAILED MANPOWER WORKSHEET
Supply Squadron (T/O & E 1-7503, W/PAT 140-9)

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Command						
Commanding officer		4902	1	1	1	1
First sergeant		502	1	..	1	..
Personnel						
Adjutant		2110	1	1	1	1
Clerk (mail)		055	1	..	1	..
Classification specialist		275	1	..	1	..
Clerk-typist		405	2	..	1	..
Unit supply						
Supply sergeant		821	1	..	1	..
Supply clerk		835	1	..	1	..
Supply control						
Technical supply		4902	2	2	1	1
Clerk		055	1	..	1	..
Clerk-typist		405	5	..	3	..
Administrative specialist		502	1	..	1	..
Ordnance supply technician		815	1	..	1	..
Supply technician		821	1	..	1	..
Supply inspector, AF		826	1	..	1	..
Supply technician, AF		826	3	..	1	..
Supply clerk		835	4	..	2	..
Property accounting						
Clerk-typist		405	2	..	1	..
Supply technician		821	1	..	1	..
Supply clerk		835	5	..	2	..
Warehouse supervisor						
Technical supply (clothing sales)		4902	1	1	1	1
Construction machine operator		359C	2	..	1	..
Clerk-typist		405	2	..	1	..
Ordnance supply technician		815	1	..	1	..
Supply technician, AF		826	4	..	2	..
Special vehicle operator		932	4	..	2	..

Table 17—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Shipping, receiving, and classification						
Carpenter		050	3	..	1	..
Airplane parts inspector		747	2	..	1	..
Airplane parts inspector		750	1	..	...	..
Supply technician, AF		826	1	..	1	..
Supply clerk		835	2	..	1	..
Air Force						
Personal equipment technician		594	3	..	1	..
Supply technician, AF		826	8	..	3	..
Supply clerk		835	10	..	4	..
Ammunition						
Ammunition supply		4594	1	1	1	1
Ammunition supply technician		505	15	..	5	..
Chemical technician		870	2	..	1	..
Munitions worker		901	36	..	12	..
Armament						
Armament and automotive		4530	1	1	1	1
Ordnance supply technician		815	1	..	1	..
Parts clerk, armament		848	3	..	1	..
Automotive						
Parts clerk, automotive		348	3	..	1	..
Communications						
Communications supply		4400	1	1	1	1
Communications supply technician		581	4	..	2	..
Supply clerk		835	1	..	1	..
Engineer and repair and utilities						
Engineering supply technician		583	3	..	1	..
Supply clerk		835	3	..	1	..
Petroleum						
Petroleum storage technician		485	4	..	2	..
Supply clerk		835	3	..	1	..
Quartermaster						
Quartermaster supply		4419	1	1	1	1
Supply technician		821	2	..	1	..
Supply clerk		835	6	..	2	..
Service stock						
Supply technician, AF		826	2	..	1	..
Supply clerk		835	7	..	3	..

Table 17—continued

	AFSC	SSN	T/O & E and PAT Authorizations			
			Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
			Total Military	Officers	Total Military	Officers
Laundry						
Laundry clerk		835	1	..	...	..
Salvage and disposal						
Salvage technician		194	1	..	1	..
Supply clerk		835	2	..	...	..
Subsistence						
Commissary		4222	1	1	...	..
Supply technician		821	1	..	1	..
Supply clerk		835	2	..	...	..
Staging kit unit						
Senior organization supply specialist	64151	826	3	..	1	..
Organization supply specialist	64151	835	3	..	1	..
TOTAL AUTHORIZATION						
Separate element for each base			...	..	88	9
Total wing (three separate elements)			193	10	264	27

Table 18

DETAILED MANPOWER WORKSHEET
Air Police Squadron (T/O & E 1-8024)

	SSN	T/O & E and PAT Authorizations			
		Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
		Total Military	Officers	Total Military	Officers
Section II, 1 × column 6					
Adjutant	9110	1	1	1	1
Commanding officer	9110	1	1	1	1
Air police officer	9110	2	2	2	2
Clerk (mail)	055	1	..	1	..
Clerk specialist (clerk-typist)	275	1	..	1	..
Clerk-typist	405	3	..	3	..
First sergeant	502	1	..	1	..
Provost sergeant	677	3	..	3	..
Air police	677	96	..	96	..
Radio mechanic (air policeman)	754	1	..	1	..
Radio mechanic (air policeman)	754	1	..	1	..
Supply sergeant	821	1	..	1	..
Supply clerk	835	1	..	1	..
Section IIA, 1 × column 5					
Air police officer	9110	1	1	1	1
Clerk-typist	405	1	..	1	..
Provost sergeant	677	1	..	1	..
Air policeman	677	23	..	23	..
Radio mechanic (air policeman)	754	1	..	1	..
TOTAL AUTHORIZATION					
Separate element for each base		...	..	139*	4*
Total wing (three separate elements)		139*	4*	417*	12*

* Less one officer (see October, 1951, SAC Manning Program).

Table 19

DETAILED MANPOWER WORKSHEET

Installations Squadron (T/O & E 1-8501T), 1 × Column 4

		T/O & E and PAT Authorizations			
		Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
	SSN	Total Military	Officers	Total Military	Officers
Command					
Commanding officer	7015	1	1	1	1
First sergeant	502	1	..	1	..
Personnel					
Adjutant	7015	1	1	1	1
Clerk (mail)	055	1	..	1	..
Classification specialist	275	1	..	1	..
Clerk-typist	405	2	..	1	..
Unit supply					
Supply sergeant	821	1	..	1	..
Supply clerk	835	1	..	1	..
Fire protection and aircraft crash rescue					
Fire and aircraft crash rescueman	9401	1	1	1	1
Fire fighter crash rescueman	1383	63	..	63	..
Engineering and management					
Construction technician	059	1	..	1	..
Draftsman	070	1	..	1	..
Sanitary technician	196	1	..	1	..
Surveyor	227	2	..	1	..
Clerk-typist	405	1	..	1	..
Engineer supply technician	583	1	..	1	..
Utilities technician	822	1	..	1	..
Maintenance and repair					
Installations officer	7015	1	1	1	1
Blacksmith	024	1	..	1	..
Carpenter	050	7	..	3	..
Construction technician	059	2	..	1	..
Electrician	078	6	..	2	..
Power lineman	078	3	..	1	..
Engineman, operating	081	1	..	1	..
Painter	144	2	..	1	..
Plumber	164	4	..	2	..
Construction worker	188	22	..	8	..
Sheet-metal worker	201	1	..	1	..
Toolroom keeper	242	1	..	1	..
Welder combination	256	2	..	1	..
Refrigeration mechanic	322	3	..	1	..
Construction machine operator	359F	7	..	3	..
Heavy automotive equipment operator	931	5	..	2	..

Table 19—continued

	SSN	T/O & E and PAT Authorizations			
		Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
		Total Military	Officers	Total Military	Officers
Utilities operation					
Engineman, operating	081	2	..	1	..
Plumber	164	2	..	1	..
Powerman	166	4	..	2	..
Construction worker	188	12	..	4	..
Sanitary technician	196	2	..	1	..
Water supply technician	727	4	..	2	..
Utilities technician	822	3	..	1	..
TOTAL AUTHORIZATION					
Separate element for each base		...	..	121	4
Total wing (three separate elements)		178	4	363	12

Table 20

DETAILED MANPOWER WORKSHEET

Motor Vehicle Squadron (T/O & E 1-8502T), Section II, 1 × Column 3

		T/O & E and PAT Authorizations			
		Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
	SSN	Total Military	Officers	Total Military	Officers
Command					
Commanding officer	0613	1	1	1	1
First sergeant	502	1	..	1	..
Personnel					
Adjutant	2110	1	1	1	1
Clerk (mail)	055	1	..	1	..
Classification specialist	275	1	..	1	..
Clerk-typist	405	3	..	1	..
Maintenance					
Automotive maintenance and repair	4805	1	1	1	1
Diesel mechanic	013	2	..	1	..
Organization maintenance inspector	014	1	..	1	..
Automotive equipment mechanic	014	26	..	10	..
Machinist	114	1	..	1	..
Painter	144	2	..	1	..
Powerman	166	16	..	6	..
Sheet-metal worker	201	3	..	1	..
Welder, combination	256	3	..	1	..
Construction equipment technician	319	3	..	1	..
Clerk-typist	405	1	..	1	..
Leather and canvas worker	609	1	..	1	..
Shop foreman	965	1	..	1	..
Automotive maintenance inspector	965	2	..	1	..
Automotive equipment repairman	965	16	..	7	..
Motor pool					
Motor transport	0600	1	1	1	1
Clerk	055	1	..	1	..
Chief motor vehicle dispatcher	055	1	..	1	..
Motor vehicle dispatcher	055	3	..	1	..
Automotive equipment operator	345	78	..	28	..
Clerk-typist	405	1	..	1	..
Decontaminating equipment operator	809	1	..	1	..
Heavy automotive equipment operator	931	2	..	1	..
Motor pool chief	9014	2	..	1	..
Refueling					
Refueling (supply)	0600	1	1	1	1
Clerk	055	1	..	1	..
Refueling chief	932	3	..	1	..
Special vehicle operator	932	34	..	12	..

Table 20—continued

	SSN	T/O & E and PAT Authorizations			
		Single-Based Wing of 30 Aircraft		Separate Element of 10 Aircraft	
		Total Military	Officers	Total Military	Officers
Supply					
Toolroom keeper	242	1	..	1	..
Parts clerk, automotive	348	2	..	1	..
Supply sergeant	821	1	..	1	..
Supply clerk	835	2	..	1	..
TOTAL AUTHORIZATION					
Separate element for each base		...	..	96	5
Total wing (three separate elements)		222	5	288	15

Table 21

DETAILED MANPOWER WORKSHEET

Food Service Squadron (T/O & E 1-8015)

	SSN	T/O & E and PAT Authorizations					
		Single-Based Wing* of 30 Aircraft		Base B Element† of 10 Aircraft		Bases A and C Elements‡ of 10 Aircraft Each	
		Total Military	Officers	Total Military	Officers	Total Military	Officers
Officers							
Adjutant	2110	1	1	1	1	1	1
Food service officer	4110	3	3	2	2	2	2
Food service supervisor	4114	1	1	1	1	1	1
Airmen							
Pastry baker	017	9	..	7	..	6	..
Meat cutter	037	5	..	3	..	3	..
Clerk	055	1	..	1	..	1	..
Cook, first	060	39	..	21	..	18	..
Cook, second	060	39	..	20	..	17	..
Food service attendant	062	89	..	46	..	40	..
Classification specialist	275	1	..	1	..	1	..
Clerk-typist	405	2	..	2	..	2	..
First sergeant	502	1	..	1	..	1	..
Supply sergeant	821	1	..	1	..	1	..
Food service steward	824	9	..	7	..	7	..
Supply clerk	835	5	..	4	..	4	..
Food service technician	1824	1	..	1	..	1	..
TOTAL AUTHORIZATION							
Separate element		...	..	119	4	106	4
Total wing		207	5	119	4	212	8

* 1 times column 37 in the T/O & E.

† 1 times column 22 in the T/O & E (for Base B only).

‡ 1 times column 19 in the T/O & E (for Bases A and C).

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