



## The Armed Forces Market for Agricultural Products in Hawaii

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# **The Armed Forces Market for Agricultural Products in Hawaii**

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## SUMMARY OF KEY POINTS

The military forces domiciled in Hawaii, including dependents, account for 18-19 percent of the total market supply disappearance of food products produced and imported in Hawaii. Together the military services are a powerful force in the local market and have the potential to contribute to economic growth of agriculture and its related services in Hawaii.

### Production Capabilities of Hawaiian Agriculture

Evaluation of Hawaii's current agricultural production capacity indicates that many of the expanding food needs of both civilian and military sectors of the economy could be met from local (Hawaii) sources. The potential for local production for supplying both civilian and military requirements exists across all commodity lines, but for the military the currently more significant commodities are meat, milk, eggs, fruits, and vegetables.

Hawaiian agriculture is capable of producing most of the food commodities normally purchased by the Armed Forces in the fresh form. The exceptions are some temperate zone fruits and some vegetables for which no suitable high-yielding tropically adapted varieties have been developed. Among the latter are Irish potatoes, which are the most important vegetable the military purchases. Irish potatoes are produced but in exceedingly limited quantities.

Land resources for increased production are available. Additional requirements for land can be met from both extensification and intensification--that is, more land can be brought into cropping as well as more multi-cropping of existing land resources.

Other resources, including credit, labor, and management can be attracted to agriculture if and when markets exist for Hawaiian agricultural commodities. This latter depends upon the producers' ability to produce commodities in a way that will make them available to prime demanders (the retail trade, including the Armed Forces) competitively with mainland inshipments.

### Market Capabilities of Hawaiian Agriculture

One of the most significant comments made by both military and civilian leaders has been that the Hawaii agricultural products marketing industry is ineffective in meeting mainland price competition. These comments were most pointedly directed at the fruit and vegetable segments of the food trade. An examination of the produce sector of the Hawaiian food industry reveals that there are a large number of dealers moving a relatively small volume of a wide range of items.

The market currently receives less than 50 percent of its vegetable requirements from local production, and the share of market for these commodities is continuing to shrink. The apparent reason for this continued shrinkage is primarily the high cost of the existing market structure. Many vegetable products move through the market in a highly inefficient fashion. Market steps are used which add costs to the production process which, in turn, must be reclaimed in the price asked. Some of these steps could be eliminated from the marketing process and thereby help in making locally produced vegetable



items more price competitive with mainland inshipments (e.g., producer integration to Armed Forces requirements, mergers, co-op development).

To some degree the indictment against the produce marketing structure holds true in other food lines. The marketer has not been particularly interested in bringing greater efficiency into the market for moving Hawaii-produced commodities. The reason for this is that up until recently the economy had a need for the more complex assembly and distribution system that prevails today; however, with the advent of large-scale retailing a more efficient system has not evolved. There are too many dealers (wholesalers, jobbers, commission men, and others), moving small quantities, none of which are adequate to meet the merchandising commitments of large-scale retailers and institutional buyers.

In order to circumvent costs incurred from inefficiencies in the local assembly-distribution complex (marketing), retailers have been forced to secure many commodities from mainland supply sources and thereby shut off the potential for increased local production. By going directly to mainland suppliers the retailer has been able to assure himself of the best available market services at least cost. Related to this change in supply source is the continuing improvement in shipping technology made available to retailers through bulk containerization. Containerization has reduced spoilage and other shipping costs which only two or three years ago were more important barriers to inshipment. It is this sort of efficiency with which the Hawaii producer must effectively contend if he hopes to reverse the trend of a diminishing share of the market for his products.

#### **Armed Forces Requirements and Procurement Procedures**

The ability of Hawaiian producers and their related assembly and distribution systems to meet Army and Air Force requirements is partially dependent upon some changes in procurement procedure. The Army and Air Force need to be able to project requirements for commodities sufficiently long in advance so that adequate lead time for production and delivery can be realized. At the time of this study, records available from within the Army's procurement system were not organized in such a way that demand projections could be made without great cost. The Army does have need for a record system which can aid procurement people in making estimates on quantities of different commodities required over some extended time period. Without this sort of records system the Army is likely to continue to bargain for its requirements on a short-term or even day-to-day basis.

The Armed Forces need also to determine the real costs of commodities currently purchased. The real cost (price paid) for a given commodity involves at least the following considerations:

1. Price at point of purchase. This is simply the price paid per pound or other convenient unit.
2. The cost of assembly. This is the cost of bringing the commodity together at some central location, either for purposes of distribution or processing. If commercial carriers are used, the cost of these is an obvious addition to price. If, on the other hand, military vehicles are used, the opportunity cost of military equipment and personnel needs to be appropriately charged in the price.

3. The cost of processing. By processing is meant any service which is added to the product to make it more acceptable for troop issue or resale. Included are such things as grading, sorting, or packaging. Costs of product services need to be added to price in comparing alternative purchases where these services are part of the condition of sale.
  
4. The cost of distribution. One of the important supplier concerns had to do with accounting for shipping costs of the Armed Forces. The contention was advanced by suppliers, that the Armed Forces in comparing prices paid for Hawaiian and mainland products, did not fairly account for costs of inshipments. Existing military records could not show the validity of the issues at stake in this controversy. The following distribution costs, however, need to be added to price in order to arrive at comparative mainland and Hawaiian commodity prices.
  - a. Freight from mainland origins needs to be computed on actual or real costs rather than what apparently is a system of cost averaging for either commercial carrier or military ships. Note: The contention (understanding) of local suppliers is that the Armed Forces do not pay anything for food shipments on military ships.
  - b. Storage costs at mainland or Hawaiian Armed Forces supply centers need to be added to accurately reflect the real comparative prices.
  - c. Hauling costs, primarily by military vehicles from unloading points to points of actual consumer distribution, need to be considered in the price comparison, particularly where local suppliers deliver directly to Armed Forces users.
  - d. Spoilage is a cost which must be accounted for in price. Information derived through interviews with Armed Forces supply people indicates that losses do occur. However, records do not show the actual volume of losses nor the effects upon the quality of products and their consequent worth in comparison with the Hawaii-produced commodity.

There is real need for more effective communications between the Armed Forces and the civilian suppliers. The lack of adequate organization among suppliers, particularly at the producer level, is a contributing factor in poor understanding between suppliers of goods and services and Armed Forces buyers. By far the more important factor is the inability or unwillingness of the Armed Forces to exercise their power in the local economy as an important customer for goods and services. It is almost certain that a great deal more can be accomplished by judicious exercise of buying power by the Armed Forces and other major buyers in bringing needed order and efficiency into the market.

The current procedure of day-to-day purchasing as practiced for some commodities by the Army is costly. Furthermore, day-to-day purchasing does not yield some benefits to the Army and Air Force which are normally available to large-scale purchasers. But even more importantly, insofar as this

study was concerned, daily or short-run negotiated purchasing does not contribute as much to an expansion of local business as would a system of contracting over an extended time period.

Contracting for requirements directly with producer groups could most effectively advance the objective of the Army's policy of local purchasing whenever practical and economically feasible. The idea of contracting, as a means for spending more military food dollars on locally produced products, is a practical alternative to short-run or day-to-day negotiations, because it brings purchasing power and the binding nature of contract into play. When contracts are negotiated the Armed Forces should exert their legal rights of conformance to contractual obligations by the contractees. Perhaps the only real exception to stipulated contractual performance should be when "Act of God" type disasters are experienced by either party. Under circumstances where local industry through poor planning or bad management is not able to live up to its contractual agreement from local resources, it should be made to import the necessary quantities from mainland sources at contracted prices and other contracted conditions of sale. There is a drawback to this latter point in that this may be contrary to conditions stipulated in contracts. A contract might require that sales to the military shall come from local production sources. The stipulation would, however, be self-defeating only if contracts were made with other than direct producer groups or producer bargaining agents.

If the Army were to exercise its market power by contracting for specific commodities over an extended time period directly with producer groups, it would do much to stimulate producer organization to meet market requirements. This sort of integration is likely to spread to other users of Hawaiian food products. The adoption by major non-military retailers of producer contracts could do much to remove existing wasteful marketing practices. In addition, action on the part of the Armed Forces and major civilian buyers would do much toward reversing trends of diminishing share of market for many Hawaii-grown products, particularly vegetable items.

The market power of the Armed Forces could be even more important to Hawaiian agriculture in adjusting to modern market and merchandising techniques, if total supply needs for all of the armed services could be centrally coordinated. It is likely that requirements for products of the different services are considerably more alike than they are for civilian buyers of Hawaii-produced agricultural food products. Central supply coordination and contracting could yield savings to both civilian producers of goods and services and to the Armed Forces. Central supply coordination and contracting could standardize contract specifications for quality, packaging, delivery, and other service features. In addition, it is probable that some of the fixed costs of production and marketing could be spread over the larger number of units sold through centralized contracting.

A final consideration relative to the implementations of policy by the Armed Forces would be for increased emphasis in the area of merchandising. Local products would probably receive more acceptance by the Armed Forces consumers if there were some joint military-civilian effort in product promotion programs. A coordinated effort by the Armed Forces and the civilian

food trade to educate potential consumers in the use of some uniquely tropical food products could contribute to increased demands for locally grown food items.

## PART I.

### Characteristics of Hawaiian Agricultural Production and Marketing

#### Introduction

Hawaiian agriculture is typified by contrasts. On one hand there are the highly developed plantation industries of sugar and pineapple, and on the other hand there is diversified agriculture, which in Hawaii means all other farming except sugar and pineapple. Diversified agriculture is made up of a wide range of large- and small-scale agricultural units producing many tropical fruits, vegetables, livestock, and livestock products. Much of diversified agriculture in Hawaii is made up of family farm units. Their size of operations is such that the owner or operator and his family are able to manage production and marketing activities, and usually require outside labor only at peak periods of land preparation, harvesting, or marketing.

Part I of this study attempts to show some of the potential of Hawaiian agriculture to produce products demanded in the market by both the civilian and military sectors of the economy. The study also examines trends in production and productivity of both crop and livestock industries in the State. Liberal use is made of secondary data published by the University of Hawaii's College of Tropical Agriculture and the Hawaii State Department of Agriculture. Parts II - IV are concerned with Armed Forces requirements and analysis of data secured from a variety of sources. Part V presents conclusions and recommendations.

#### Production Standards of Hawaii

The physical environment of temperature, rainfall, and soil conditions are such that a wide variety of crops are produced the year round in Hawaii. Table 1 shows some standards of production for a selected group of crops which can be grown successfully in Hawaii.

Most of the data presented in Table 1 are from unpublished estimates made by Dr. Otto M. Younge and M. Takahashi, Professor and Associate Agronomist, respectively, Department of Agronomy and Soil Science, College of Tropical Agriculture, University of Hawaii. Although the estimates were made in 1950 they are applicable to 1964-65 conditions.

Particular attention should be given to the last three columns of Table 1; Annual Fair Yield Estimates, 1964 Annual Average Production, and the differences between 1964 Annual Average Production and Fair Yields. In almost all instances, 1964 average production per acre was less than fair yield estimates. What this means is that except for perennial crops, producers probably did not produce any given commodity on a year-round basis.

Table 1. Standards of production<sup>1/</sup>

Commodity	Time crop occupies field	Seasons of harvest	Elevation adaptability	Saleable yield per acre per crop			Crops per year	Annual fair yield estimate	1964 Annual average production	1950 <sup>2/</sup> + Estimate
				Poor	Fair	Good				
	Days	Quarters	Zone	1,000 lbs.			No.	lbs/acre	lbs/acre	lbs.
Beans, snap	90-150	All	Low-Medium	6.0	7.5	9.0	3-4	26,250	13,300	-12,950
Broccoli	65-120	"	Medium-High	3.5	5.0	7.5	3-4	17,500	10,900	-6,600
Cabbage, head	60-105	"	"	10.0	12.0	15.0	3-5	48,000	22,400	-25,600
Carrots	90-120	"	"	9.0	11.0	15.0	3-4	38,500	21,800	-16,700
Celery	110-150	"	"	20.0	30.0	40.0	2.5-3	82,500	43,300	-39,200
Corn, sweet	80-90	"	Low-Medium	3.5	4.5	6.0	3-4	15,750	3,300	-12,450
Cucumber	80-90	"	"	6.0	9.0	12.0	3-4	31,500	21,100	-10,400
Eggplant	150-210	"	Low	7.0	9.0	12.0	1.5-2	15,750	23,500	+7,750
Lettuce	50-60	"	Low-High	6.0	8.0	10.0	5-6	85,000	12,800	-72,200
Onions, dry	90-100	1 and 2	Medium-High	6.0	8.0	10.0	1-1	8,000	15,000	+7,000
Peppers, sweet	120-160	All	Low-Medium	5.0	6.5	8.0	2-3	16,250	15,000	-1,250
Potatoes	100-120	"	Low-High	5.0	7.5	10.0	3-3.5	24,375	7,400	-16,975
Squash	80-130	"	Low-Medium	8.0	10.0	14.0	2.5-4	35,750	19,000	-16,750
Sweetpotatoes	120-180	"	"	6.0	8.0	12.0	2-3	20,000	14,400	-5,600
Tomatoes	90-120	"	"	6.0	9.0	12.0	3-4	31,500	23,800	-7,700
Watercress	60-85	"	Low	7.0	10.0	12.0	4-5	50,000	66,000	+16,000
Cantaloupes	90-100	2 and 3	Low	2.0	4.0	6.0	2-2	8,000	7,200	-800
Watermelons	90-120	2 and 3	Low-Medium	4.0	6.0	10.0	2-2	12,000	10,700	-1,300
Avocados	-	Continuous	Low-Medium	2.5	3.5	5.0	-	5,000	5,600	+600
Bananas	-	"	Low	15.0	25.0	30.0	-	25,000	10,200	-14,800
Papayas	-	"	"	15.0	25.0	30.0	-	25,000	32,800	+7,800

<sup>1/</sup> Dr. Otto M. Younge and M. Takahashi--Professor and Associate Agronomist, respectively, Department of Agronomy and Soil Science, College of Tropical Agriculture, University of Hawaii, unpublished data, estimates made in 1950. Some modifications were made; namely, for lettuce, bananas, and papayas.

<sup>2/</sup> Estimated fair yield less 1964 average production estimates.

## Fruits and Vegetables

Approximately half of the fresh fruits and vegetables currently consumed in Hawaii are imported from the U. S. Mainland. A rough estimate of the land equivalents required to displace imports under current production techniques is presented in Table 2 for selected fruits and vegetables.

With the exception of carrots, potatoes, and dry onions, Hawaii's diversified agriculture produces over 50% of the selected vegetables included in Table 2. Of the total fruits, vegetables, and melons which moved through the Hawaii market from all sources in 1964, 25.5% was represented by inshipments of carrots, potatoes, and dry onions. These three items represent over 33 percent of the total if only the items in Table 2 are used.

In the 15-year period 1950-1964, acreages devoted to vegetable and melon production have decreased significantly; however, marketing has remained relatively even. Improved varieties, better means and methods of cultivation, new herbicides, and more fertilizer have probably all contributed to increased vegetable yields, but perhaps the most important factor has been more intensive land use. Figure 1 shows the general downward trend of vegetable acreages from 1950 to 1964. The figure also shows market volume over the same time period. As was pointed out earlier, about half of the vegetables and fruits marketed in Hawaii are imported from outside the State, primarily from the U. S. Mainland. Figure 2 shows comparative quantities in percent of total vegetables marketed for the years 1950-1964.

An interpretation of Figure 1 is that Hawaii producers have been able to increase the production of certain vegetables on less acres, and, perhaps, thereby keep pace with growing population and its related demand characteristics. Figure 2 shows that the share of market for Hawaii producers has been diminishing slightly over the 15 years included in this study. Vegetables and vegetable products such as potatoes, carrots, and dry onions apparently have been produced more efficiently on the Mainland. Of vegetables included in Table 2, potatoes, carrots, and dry onions have been supplied mostly from Mainland sources over the 15-year period.

Fruits marketed in Hawaii follow a pattern much the same as that described for vegetables, except that acreages have constantly risen. Figure 3 shows the increased acreage devoted to fresh fruit production (excluding pineapple). The increased volume of fruit is largely due to papaya production, part of which is shipped out of the State (Figure 4).

Fresh fruit production in Hawaii is mostly devoted to tropical and subtropical fruits. Temperate zone fruits such as apples, pears, and grapes are supplied from the U. S. Mainland, often in great quantity, as are certain subtropical fruits such as citrus. To appreciate fully the current production of fresh fruits in Hawaii, the outshipment of papaya and fresh pineapple should be considered. Table 3 shows the quantities of these commodities shipped from Hawaii, 1960-1964. The table shows notable increases in outshipment of pineapple and papaya over the 5 years. When pineapple and papaya are considered in the import-export balance, Hawaii becomes a net exporter of fresh fruits.

Table 2. Acreage and yields per acre in Hawaii, and estimated land equivalents required to displace imports of selected fruit and vegetable items in 1964

Selected fruit and vegetable items	1958-62 Average acres produced	1964 Acreage for selected items	1958-62 Average per acre production	1964 Average per acre production	1964 Total production, State of Hawaii	1964 Total imports of selected items	1964 Percent of total supply produced in Hawaii	Land equivalents to displace 1964 imports
	Acres	Acres	1,000 lbs.	1,000 lbs.	1,000 lbs.	1,000 lbs.	Percent	Acres
Beans, snap	150	120	12.0	13.3	1,600	--	100.0	--
Broccoli	43	38	7.8	10.9	415	166	70.9	15
Cabbage, head	480	460	17.9	22.4	10,300	170	98.4	8
Carrots	43	34	12.8	21.8	740	3,764	16.4	173
Celery	40	60	42.5	43.3	2,600	1,535	62.9	36
Corn, sweet	240	240	3.3	3.3	800	--	100.0	--
Cucumbers	240	190	15.4	21.1	4,000	3	99.9	--
Eggplant	39	43	22.6	23.5	1,010	--	100.0	--
Lettuce	310	400	11.3	12.8	5,100	4,243	54.6	332
Onions, dry	110	80	15.5	15.0	1,200	7,520	13.8	501
Peppers, sweet	70	60	14.3	15.0	900	187	82.8	13
Potatoes	65	29	6.9	7.4	215	29,823	0.7	4,030
Squash, Italian	13	10	14.8	19.0	190	103	64.8	5
Sweetpotatoes	120	80	11.6	14.4	1,150	250	82.1	17
Tomatoes	330	320	18.2	23.8	2,600	1,698	81.7	71
Watercress	30	32	100.0	66.6	2,130	--	100.0	--
Cantaloupes	16	3	7.6	7.2	150	1,303	10.3	181
Watermelons	300	260	9.7	10.7	1,600	4,947	24.4	462
Avocados	180	180	5.9	5.6	1,015	--	100.0	--
Bananas	890	890	8.1	10.2	9,100	--	100.0	--
Papayas	550	750	26.2	32.8	24,585	--	100.0	--

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

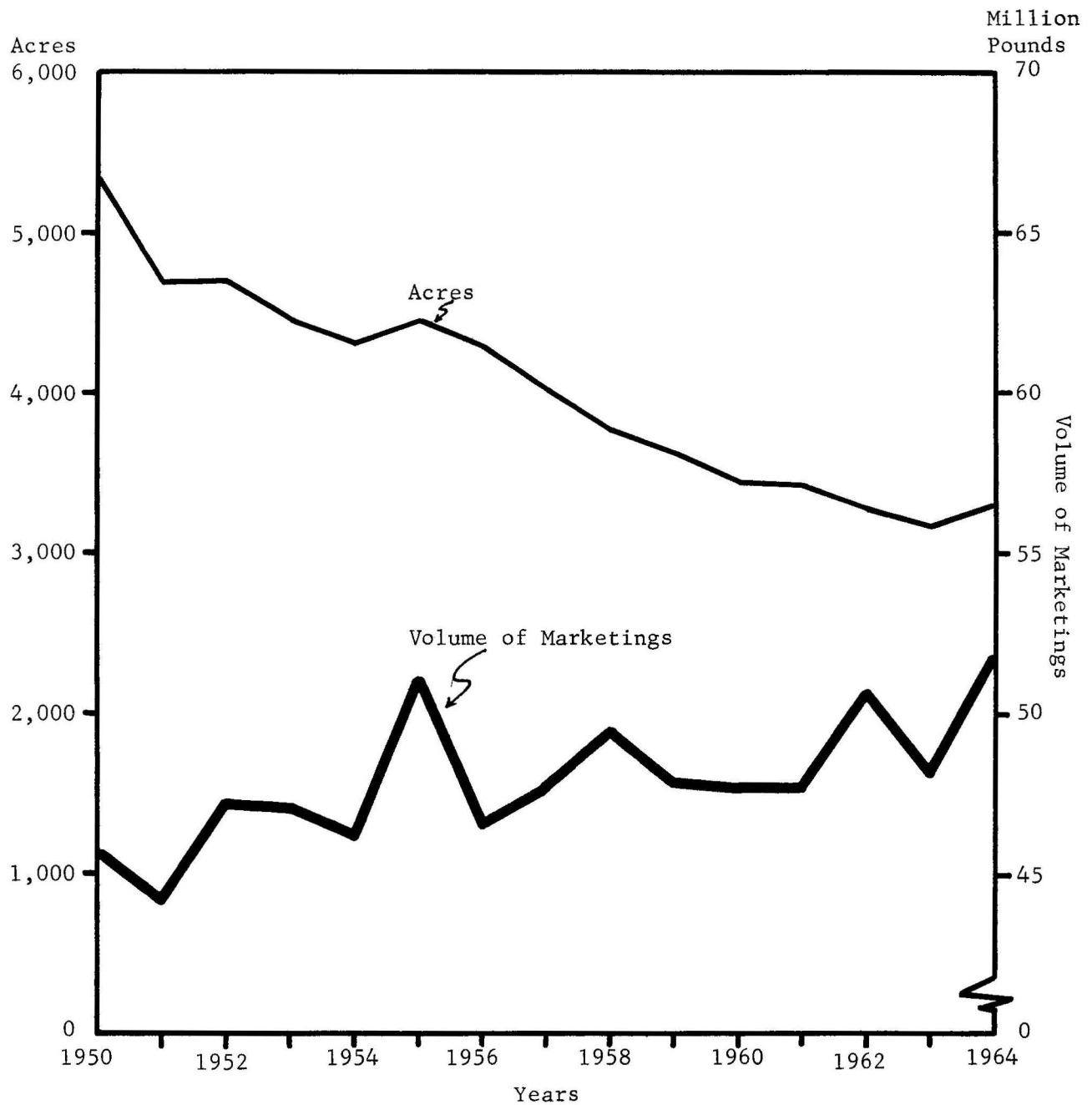


Figure 1. Acres and volume of marketings, Hawaii-produced vegetables and melons, 1950-1964.

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.



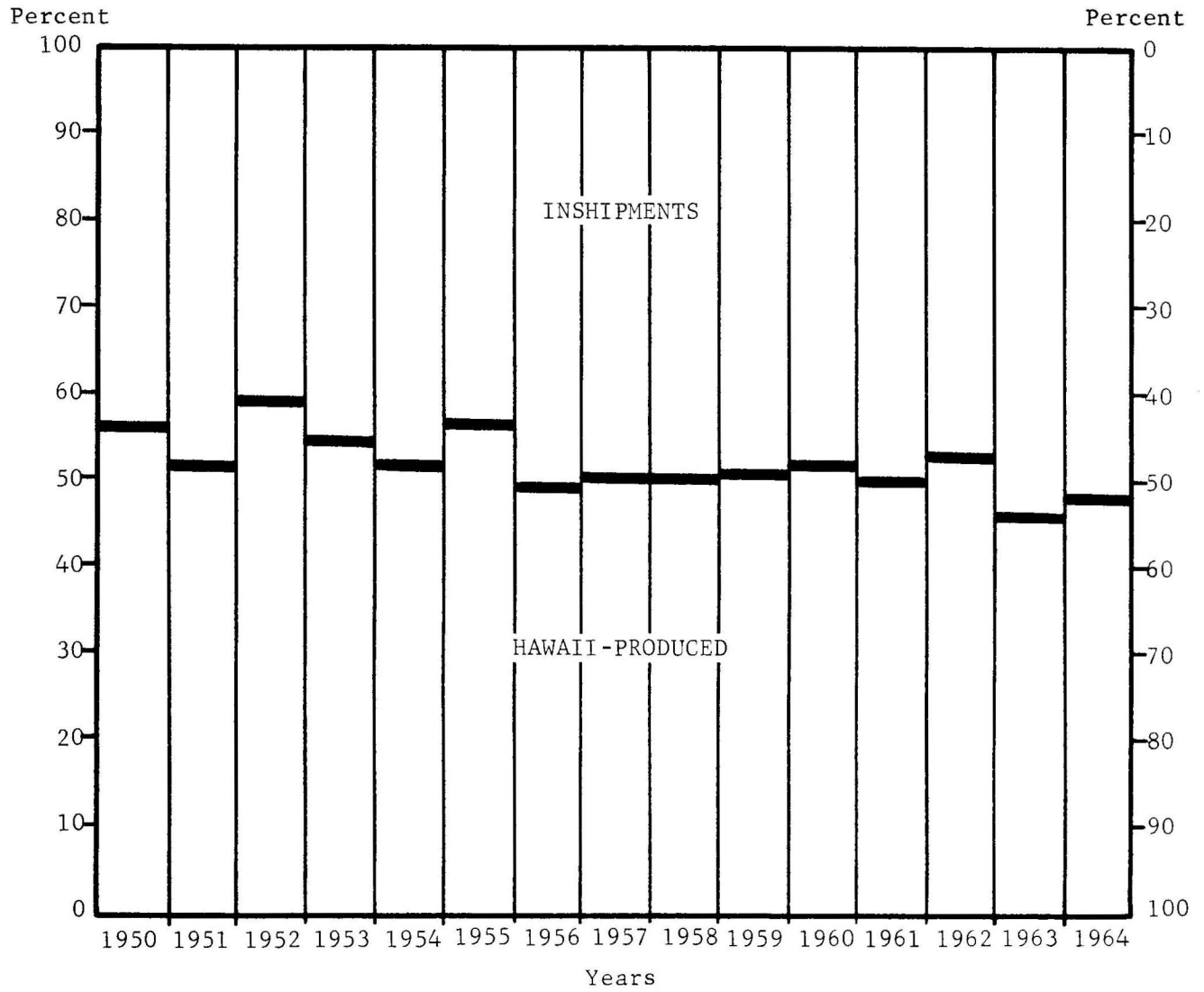


Figure 2. Comparative volume of fresh vegetables and melons by source in the Hawaii market, 1950-1964. (In percent of total supply.)

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

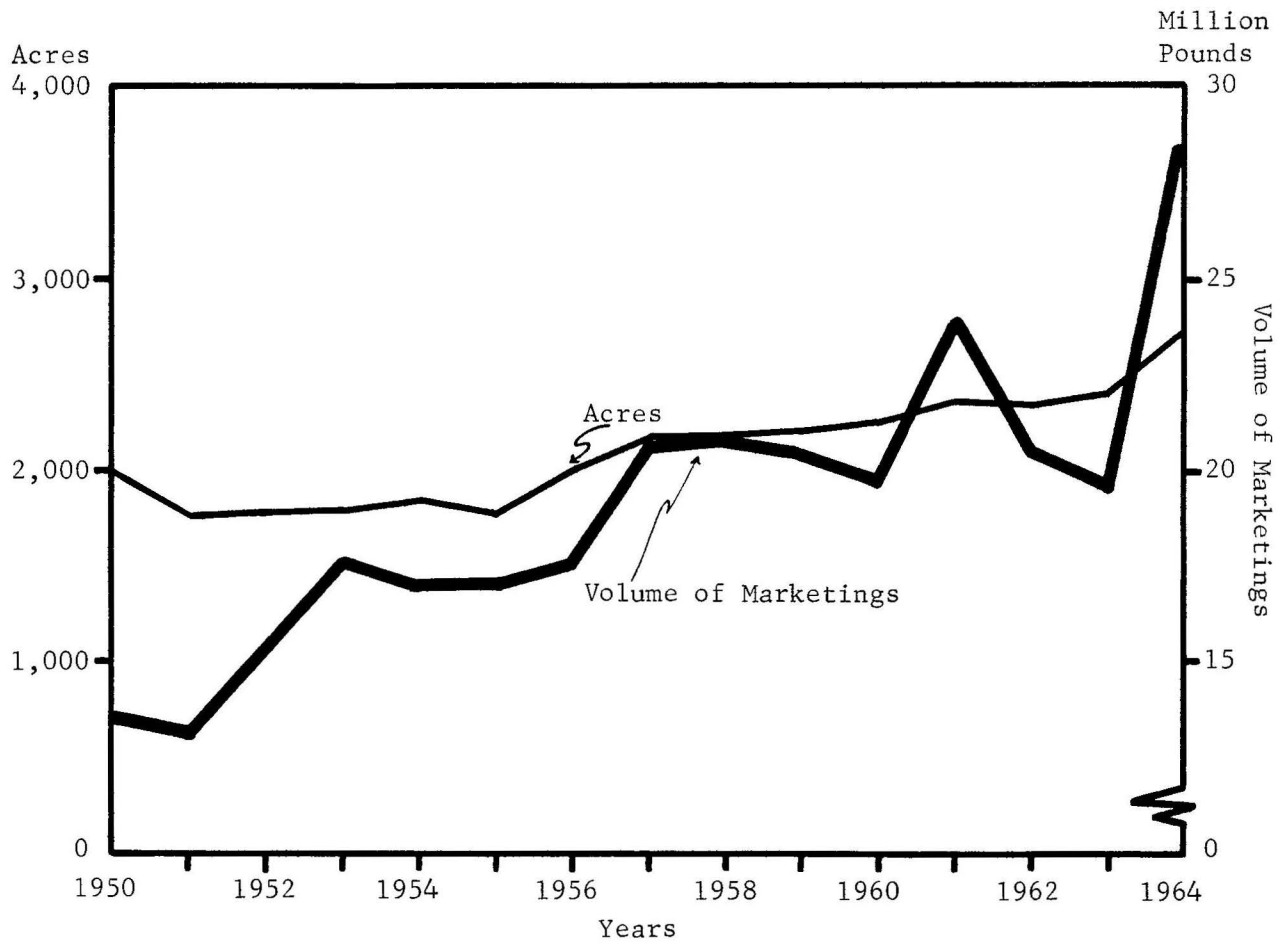


Figure 3. Acres and volume of marketings, Hawaii-produced fresh fruits, 1950-1964.

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

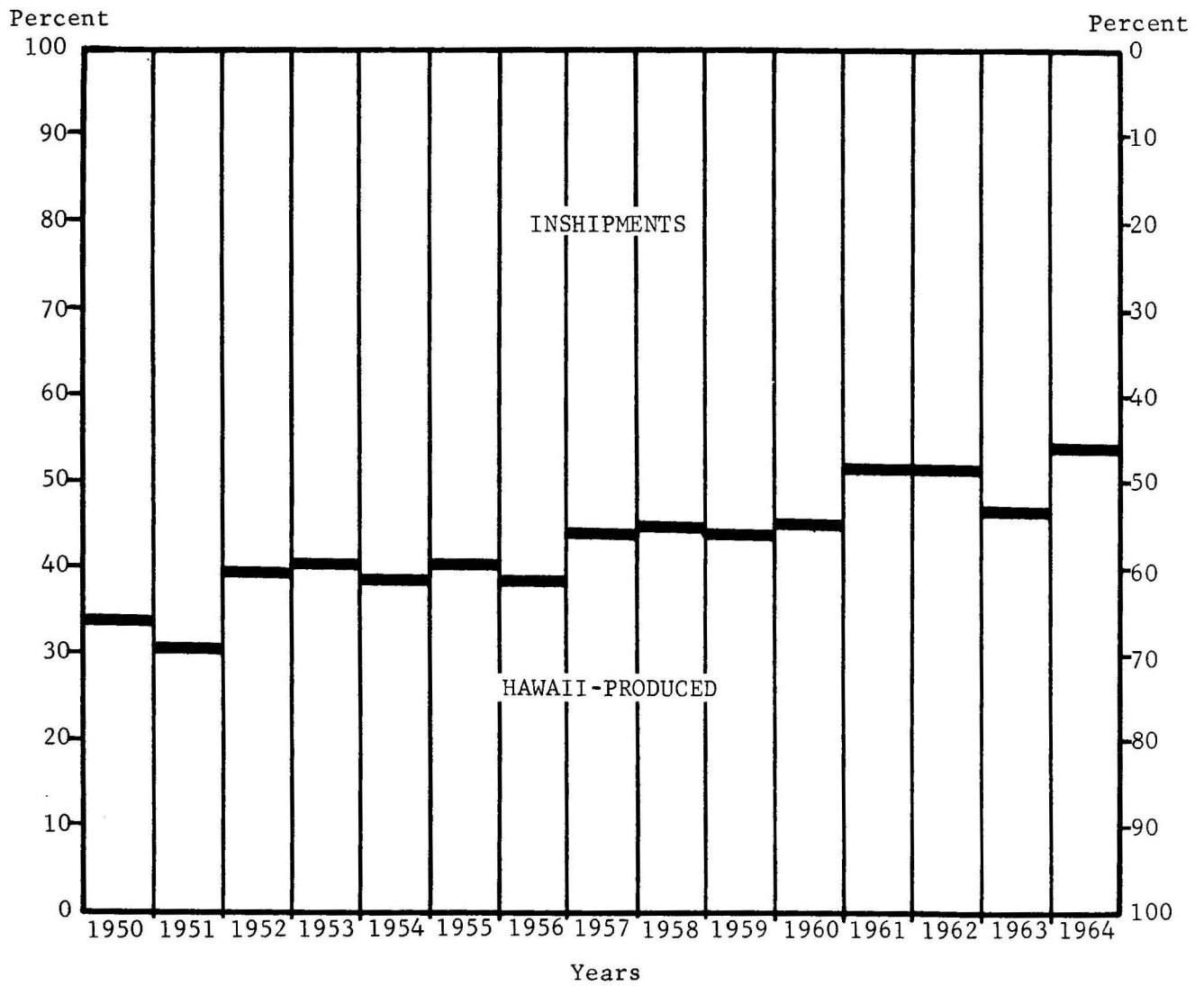


Figure 4. Comparative volume of fresh fruits by source in the Hawaiian market, 1950-1964. (In percent of total supply.)

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

Table 3. Outshipments of selected fresh fruits and nuts, 1960-1964

Year	Pineapple	Papaya	Coffee	Macadamia
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>
1960	15,985	1,067	9,573	250
1961	15,126	2,738	8,747	357
1962	14,752	3,320	6,222	422
1963	21,522	3,196	7,583	740
1964	38,415	4,436	6,435	739

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

#### Livestock and Livestock Products

The whole range of livestock and livestock products normally produced on the U. S. Mainland can be produced in Hawaii. Over the 15-year period 1950 to 1964, considerable change occurred in the production of meat, milk, eggs, and poultry in Hawaii.

#### Beef and Veal

On a per capita basis Hawaii beef and veal production has steadily taken a smaller share of the market (Figure 5). In terms of total supply, there has been no appreciable increase in the quantities supplied since 1957, except in the last 2 years (1963-1964) when the impact of increased pen feeding started to make itself felt in the market. Table 4 shows market supply estimates for Hawaii production for the years 1950-1964.

The demand for red meat has increased for two reasons: (1) increased population, and (2) increased per capita consumption. Over the 15 years under consideration population increased by more than 200,000 persons and per capita red meat disappearance increased by over 42 pounds.

#### Pork

There has been no appreciable change in pork production in the State during the 15 years 1950-1964; however, a change has taken place in the market share held by Hawaii's producers. Figure 5 shows that Hawaii's producers supplied over 60 percent of the pork marketed in the early 1950's and less than 40 percent in 1964. There seems to be no reason to believe that this downward trend will not continue into the future.

Mainland inshipments of pork products have increased almost threefold over the 15 years 1950-1964. Foreign pork inshipments have not played a significant role in the total fresh pork supply of the State. Table 5 presents supply statistics for Hawaii, 1950 to 1964.

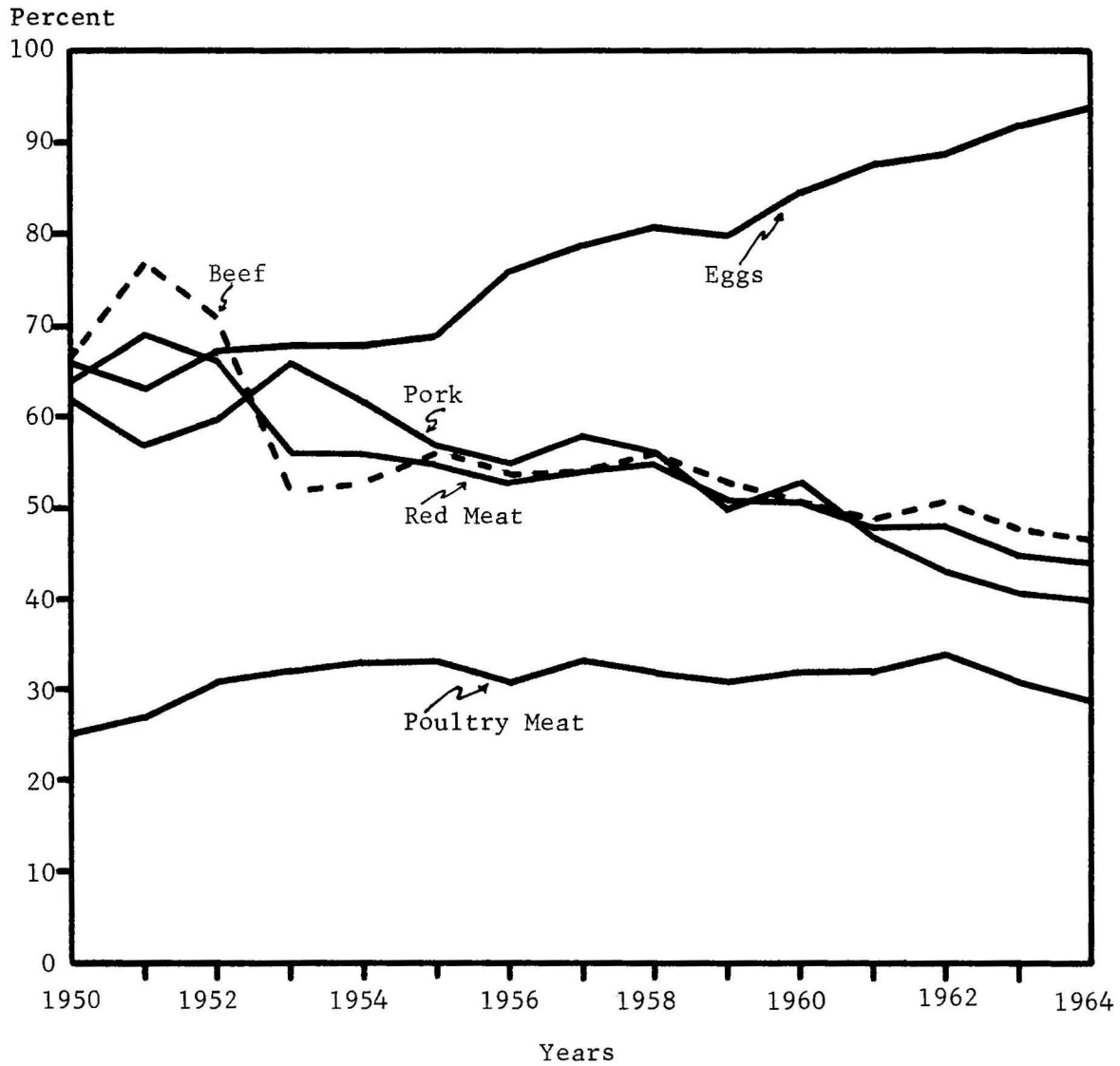


Figure 5. Percent of total disappearance of Hawaii-produced livestock products (per capita).

Source: Current research, Department of Agricultural Economics, College of Tropical Agriculture, University of Hawaii.

Table 4. Estimated market supply of beef and veal in the Hawaii market, 1950-1965

Year	Total market supply	Source of Hawaii beef and veal supply			Percent of total product produced in Hawaii
		Hawaii	Mainland U.S.	Foreign	
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u> <sup>1/</sup>	<u>Percent</u>
1950	23,292	15,558	7,647	87	66.8
1951	23,183	17,931	5,084	168	77.3
1952	25,855	18,299	7,352	204	70.8
1953	28,633	14,885	12,692	1,056	52.0
1954	33,373	17,851	14,037	1,485	53.5
1955	36,571	20,445	13,738	2,388	55.9
1956	39,698	21,426	15,919	2,353	54.0
1957	42,028	22,788	14,768	4,472	54.2
1958	42,887	23,970	10,457	8,460	55.9
1959	46,618	24,749	10,838	11,031	53.1
1960	48,303	24,736	11,423	12,144	51.2
1961	51,050	24,960	12,254	13,836	48.9
1962	48,053	24,345	10,517	13,191	50.7
1963	54,805	26,094	12,775	15,936	47.6
1964	55,504	26,242	13,904	15,358	47.3
1965	59,652	26,487	16,242	16,923	44.4

<sup>1/</sup> Equivalent pounds bone-in (weight x 140).

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service. (Data for foreign inshipments adjusted for bone-in equivalents.)

Table 5. Estimated market supply of pork in the Hawaii market, 1950-1964

Year	Source of Hawaii pork supply			Total market supply	Percent of total product produced in Hawaii
	Hawaii	Mainland U.S.	Foreign		
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>Percent</u>
1950	6,710.0	4,181.0	4.0	10,895.0	61.6
1951	7,126.5	5,435.0	43.0	12,604.5	56.5
1952	8,341.0	5,598.0	79.0	14,018.0	59.5
1953	9,866.3	4,680.0	302.0	14,848.3	66.4
1954	9,329.0	5,291.0	340.0	14,960.0	62.4
1955	8,568.2	6,253.0	260.0	15,081.2	56.8
1956	9,282.6	7,422.0	188.0	16,892.6	55.0
1957	8,999.9	6,578.0	38.0	15,615.9	57.6
1958	8,780.3	6,679.0	95.0	15,554.3	56.4
1959	8,176.8	8,042.0	209.0	16,427.8	49.8
1960	8,831.2	7,793.0	109.0	16,733.2	52.8
1961	8,475.5	9,410.0	106.0	17,991.5	47.1
1962	7,928.3	9,983.0	446.0	18,357.3	43.2
1963	8,246.0	11,615.0	46.0	19,907.0	41.4
1964	8,842.6	13,378.0	30.0	22,250.6	39.7

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service. (Reported data converted to slaughter weights.)

None of the Hawaii pork slaughter operations were federally inspected in 1964.

#### **Poultry Meats**

On the average, Hawaii producers have provided about 30 percent of the total chicken and turkey meats consumed in Hawaii. Table 6 shows the relative quantities produced in the State and quantities imported. It may be noted in the table that all turkey meat is imported.

#### **Eggs**

Egg production in the State has increased steadily over the 15 years 1950 to 1964. Almost 95 percent of total civilian requirements are produced in Hawaii (Table 7). It can be noted from the table that per capita egg consumption in the State has more than doubled in the 15-year period.

Inshipments of eggs have declined fairly steadily since 1955.

Egg consumption in Hawaii is below the national level of 314 eggs per person in 1964. Whereas there has been an upward trend in egg consumption in Hawaii, mainland U. S. per capita consumption has been downward since 1945 when over 400 eggs per person were consumed.<sup>1/</sup>

#### **Milk**

All fresh milk and many dairy products such as cottage cheese, sour cream, cream, and ice cream are produced by the Hawaii dairy industry.

Statistics indicate that the per capita consumption of fresh milk is about 93 quarts or about 194 pounds per year in 1964 (Table 8).

#### **Hawaii's Capability to Produce Required Food Products for the Armed Forces**

The several tables and charts presented earlier in this report show ample evidence that Hawaii's farmers and ranchers are capable of producing a wide variety of food products. Many, if not most, products shown in the charts and in tables are purchased by the Army and other military forces in Hawaii for troop issue purposes and for resale through the commissary system as well as for clubs and post exchanges.

At the outset it can be stated that the Army is fully committed to the idea of purchasing locally so long as a number of procurement objectives can be satisfied. The survey conducted by the 322nd Civil Affairs Group (a U. S. Army Reserve Unit in Hawaii) during August, 1965, indicated five general objectives to which any supplier should conform. These general areas of conformance are: (1) price, (2) quality, (3) quantity, (4) timeliness, and (5) regularity.

The five objectives are not listed in any order of importance. It is probable that under-performance in any of them would make continued military sales difficult for vendors or producers.

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<sup>1/</sup> Economics Research Service, U. S. Department of Agriculture, U. S. Food Consumption, Statistical Bulletin No. 364, p. 94, June 1965.



Table 6. Estimated market supplies of chicken and turkey meats in the Hawaii market, 1950-1964

Year	Source of Hawaii chicken and turkey meat supply			Total market supply of poultry meat 1,000 lbs.	Percent of total product produced in Hawaii Percent
	Hawaii 1,000 lbs.	Mainland U.S. (C) <sup>1/</sup> 1,000 lbs.	Mainland U.S. (T) <sup>2/</sup> 1,000 lbs.		
1950	1,296.1	3,204.0	674.0	5,174.1	25.0
1951	1,736.2	3,863.0	754.0	6,353.2	27.3
1952	1,842.8	3,030.0	1,149.0	6,021.8	30.6
1953	2,198.3	3,035.0	1,581.0	6,814.3	32.3
1954	2,469.4	3,454.0	1,521.0	7,444.4	33.2
1955	2,702.7	3,590.0	1,942.0	8,234.7	32.8
1956	3,201.9	4,610.0	2,502.0	10,313.9	31.0
1957	3,705.0	5,283.0	2,250.0	11,235.0	33.0
1958	3,719.3	5,419.0	2,529.0	11,667.3	31.9
1959	3,794.7	6,150.0	2,452.0	12,396.7	30.6
1960	4,230.2	6,170.0	2,708.0	13,108.2	32.3
1961	4,613.7	7,215.0	2,788.0	14,616.7	31.6
1962	4,745.0	7,207.0	2,139.0	14,091.0	33.7
1963	4,976.4	7,950.0	2,936.0	15,862.4	31.4
1964	4,715.8	8,653.0	3,120.0	16,488.8	28.6

<sup>1/</sup> Chicken meat.

<sup>2/</sup> Turkey meat.

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

Table 7. Estimated market supply of eggs in the Hawaii market, 1950-1964

Year	Source of egg supply		Total market supply of eggs	Per capita consumption of eggs in Hawaii			Percent of total product produced in Hawaii
	Hawaii	Imports		Hawaii produced	Total consumption		
	<u>Dozen</u>	<u>Dozen</u>	<u>Dozen</u>	<u>Dozen</u>	<u>Dozen</u>	<u>Number</u>	<u>Percent</u>
1950	3,707.000	1,896.000	5,603.000	7.84	11.85	142.2	66.2
1951	4,042.000	2,392.380	6,434.380	8.56	13.64	163.6	62.8
1952	4,882.000	2,433.300	7,315.300	10.56	15.82	189.8	66.7
1953	5,360.000	2,498.700	7,858.700	11.45	16.78	201.4	68.2
1954	5,995.000	2,791.230	8,786.230	12.64	18.52	222.3	68.2
1955	6,591.000	2,921.000	9,512.000	13.40	19.34	232.0	69.3
1956	7,872.000	2,515.000	10,387.000	15.37	20.28	243.3	75.8
1957	8,834.000	2,304.000	11,138.000	16.41	20.69	248.3	79.3
1958	9,397.000	2,271.000	11,668.000	16.77	20.82	249.8	80.5
1959	9,917.000	2,499.000	12,416.000	17.08	21.39	256.7	79.9
1960	11,667.000	1,992.000	13,659.000	19.61	22.96	275.5	85.4
1961	12,667.000	1,705.000	14,372.000	20.67	23.46	281.5	88.1
1962	13,250.000	1,639.000	14,889.000	20.84	23.41	281.0	89.0
1963	14,167.000	1,156.000	15,323.000	21.61	23.37	280.5	92.5
1964	15,667.000	972.000	16,639.000	23.21	24.65	295.8	94.2

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

Table 8. Milk production estimates for the State of Hawaii, 1950-1964

Year	Production	Sales	Per capita disappearance
	<u>Million pounds</u>	<u>Million pounds</u>	<u>Pounds</u>
1950	76.6	76.6	162.0
1951	82.6	82.6	175.0
1952	80.1	80.1	173.1
1953	86.5	86.5	184.8
1954	87.1	87.1	183.6
1955	90.1	90.1	183.2
1956	100.6	100.6	196.4
1957	108.9	108.9	202.3
1958	116.7	113.6	202.6
1959	114.9	112.0	192.9
1960 <sup>1/</sup>	128.0	116.1	195.1
1961 <sup>1/</sup>	130.0	119.2	194.6
1962 <sup>1/</sup>	131.0	126.0	198.1
1963 <sup>1/</sup>	128.0	124.0	189.2
1964 <sup>1/</sup>	136.0	131.0	194.1

<sup>1/</sup> Change in method of recording, 1960-1964. Include estimates all farms, prior period estimates for commercial farms.

Source: Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.

Price: One of the primary objectives of the Army's procurement practices is to secure the needed supplies at the best possible price. For troop issue, price is critical because of dollar limitations placed on per man subsistence allowances. In commissary buying, price is critical because it sets the basis for savings which are passed on to the qualified military consumer. Price, of course, also plays an important role in buying for officers' clubs, non-commissioned officers' clubs, and post exchanges.

Under current procurement practices, the Army is in the local market daily to purchase its basic requirements or to supplement its requirements with inshipments from the continental United States. On the whole the Army reacts to price in about the same way as a housewife charged with budgeting the family food dollar; it shops around for the best buy relative to quality and price.

The local vendor or farm producer, in supplying Army requirements for certain commodities (particularly for troop issue), is faced with competition evolving from the Army's central procurement policy. In this system selected groups of commodities including meat, potatoes, celery, lettuce, carrots, and dry onions are purchased centrally on the Mainland. This central purchasing concept involves a system of price averaging which provides any command located anywhere in the world with the same or very similar prices. For example, Irish potatoes are purchased in Maine, Idaho, and California. An assumed price for potatoes might be: \$4.00 per cwt. in Idaho, \$3.95 in Maine, and \$3.85 in California. The total purchase is based upon the number of troops to be served around the world over a pre-selected time period. The troop requirement is established through the master menu used by the Army. Average price is computed by using costs at all locations and presumably adding to these the cost of transportation, storage, spoilage, and perhaps other costs which could be incurred in central buying. Total costs are then divided by pounds, or some other convenient unit, to arrive at unit cost which is administratively charged, in the accounting system to each command wherever located.

The problem of competitive pricing insofar as Hawaii producers and vendors are concerned is one of meeting the price computed to the whole system by central purchasing and accounting. It needs to be pointed out that many products, because of their high degree of perishability, do not lend themselves to central procurement; also, for some products, prices derived by price averaging may or may not be equitable to the military purchaser; nor may they necessarily reflect the real value of a local produce as compared with military inshipments.

In the civilian economy the problems faced by major retailers are not unlike those of the Armed Forces. Price plays an equal or even more important role. Large-volume selling in a highly competitive environment requires the retail buyer to seek sources of supply which must more or less conform to the same five conformance factors listed earlier for the Armed Forces. Because of the relatively limited market for many Hawaiian food products (primarily the City and County of Honolulu) the retailer and the producer alike face problems of production and merchandising that are highly responsive to such factors as supply, consumer demands, income, and a host of others. Some commodities may suffer serious price drops if only a few added acres of the commodity are produced. There simply is no other market outlet for over-production of many Hawaii-produced commodities.

For the most part it can be said that Hawaii wholesale prices reflect mainland prices plus the cost of transportation.

It is not unlikely that some commodities centrally purchased by the military could be produced locally on a competitive price basis if the Armed Forces market is assured.

Quality: Along with price, the survey conducted by the 322nd Civil Affairs Group indicated that quality factors are important in military procurement. For troop issue purposes, there appear to be four areas of concern: (1) sanitation, (2) nutrition, (3) palatability, and (4) grade.

Sanitation: The military does everything necessary to assure itself against food contamination. The local vendor or producer must be able to conform to sanitation standards designed to guard troop health. In addition, because Army procurement personnel buy for commissary purposes the military dependent buyer is assured of comparable safeguards.

Nutrition: The master menu is designed to keep troops fit by including items in menu which assure a balanced diet.

Palatability: Items purchased for both troop issue or resale must be palatable. In troop issue the measure of palatability is determined by what is not eaten and ultimately fills the garbage pail. In the commissary the standard is the same as for any retail establishment; the criterion is the amount which independent consumers purchase off the counter or shelf.

Grade: The Army buyer along with his civilian counterpart faces similar problems in buying large quantities of a variety of fresh crop and livestock products to satisfy a wide range of customers. Both depend to a large measure upon product grades and standards as indicators of quality, and these are the only really meaningful before-use indicators of quality.

In Hawaii, product grading and standardization is a continuously on-going process. Both the Federal and State governments have well-established systems for inspection and grading of Hawaii products, and both sanitation inspection and quality grading are carried on. For some products, such as meats, the military requires Federal inspection and grading. In some instances costs for converting existing plants and facilities to qualify for Federal inspection have been prohibitive.

Quantity: The U. S. Army in Hawaii, as well as the other services, buys large volumes of livestock and crop products, and is a potentially large customer of vendors and producers of Hawaii-grown commodities. However, so long as price or quantity available is not suitable to meet requirements, the Army will continue to look for its supplies outside of Hawaii. Currently the Army does buy large quantities of products through local vendors; however, a large share of these commodities simply move through local vendors from mainland sources.

It is evident also that the Army does not realize savings as a result of volume buying. Often it must go to a number of vendors to meet its short-term requirement (day-to-day sales in commissaries). This is a costly procedure which is reflected in prices the Army pays for products produced locally. The problem may not be entirely the fault of local producers'

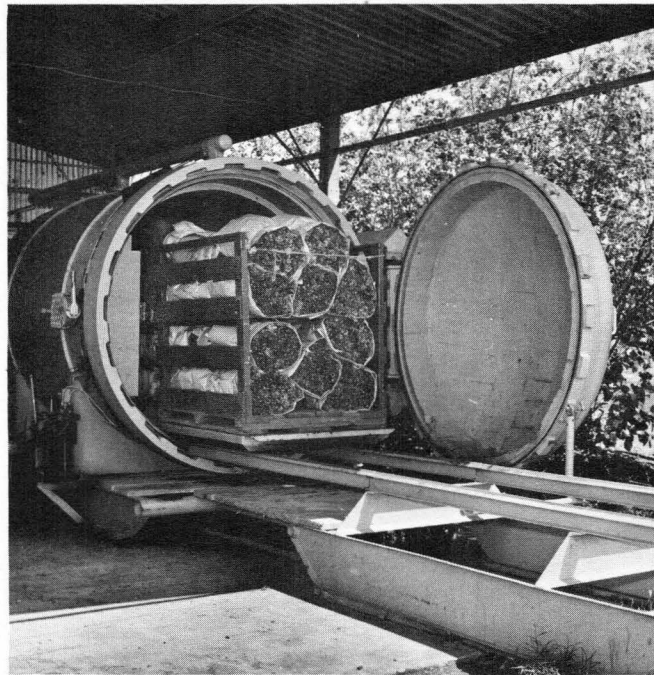
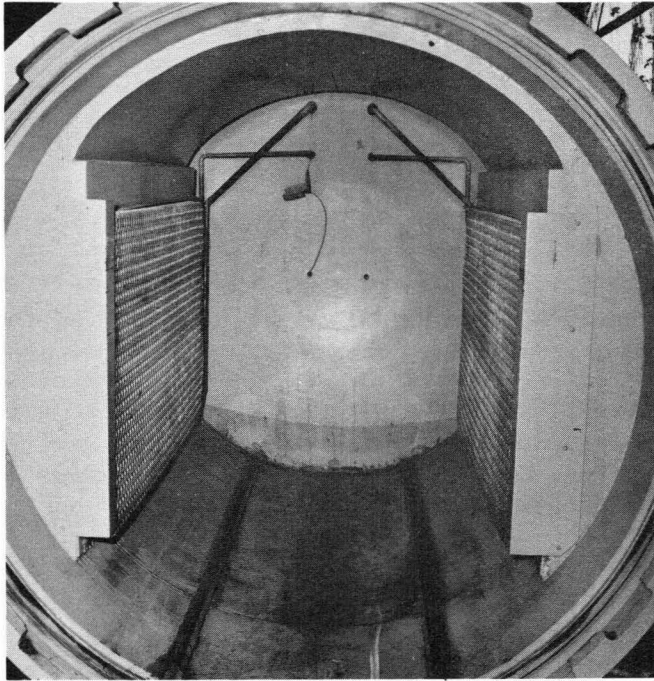


Figure 6. Vacuum pre-cooling of vegetables. Vacuum pre-cooling helps extend the shelf life of fresh vegetables in commissaries and in the home refrigerator. It also helps maintain quality of the vegetable product during shipping. The latter is an important consideration where products must be ocean freighted from the Neighbor Islands.

inability to supply in large unit lots, but may also be the Army's apparent inability to effectively project its requirements so that producers can effectively plan to meet Army supply requirements.

Currently the Army issues "The Intent To Buy List." This list contains a variety of commodities, primarily fruits and vegetables, which the Army will need over a selected time period. The list is published one, two, or three weeks in advance of the time delivery is required. Even though the list may be useful to vendors, it is almost certain to be of little use to the producer because of the time that would be required to increase production to meet this specific demand. Secondly, insofar as the producer is concerned, the "Intent to Buy" list does not commit the Army to make the purchase from local production resources. The vendor (wholesaler or jobber) can go to mainland sources to supply some of the listed commodities. The list's impact upon the State's economy is, therefore, of much less significance than if the commodity had been contracted for in advance from local producers.

There appears to be no good reason why producers (farmers) in Hawaii could not collectively commit themselves to produce specific volumes for the Army or Armed Forces market. This, of course, presumes that the Army knows what it will need sufficiently far in advance that farmer groups could have the lead time necessary to produce and deliver the products. What this also implies is that farmers in different parts of the State would find it expedient to integrate vertically into the Armed Forces market through a system of contracts. Together, a number of farmers, through a farmer-owned cooperative or other corporate venture, could meet volume requirements. Producers or their cooperatives could bid for contracts to supply either on a fixed price and time basis or on some variation of variable pricing which seems most suitable for the commodity under consideration.

At this point, it is speculation as to the size of the savings which would accrue to the Armed Forces; however, it is obvious that increased sales potentials from Hawaii's farms and ranches would be realized. Savings to the Armed Forces would accrue when and if production and marketing costs are reduced and satisfactorily reflected in an equitable contract price per commodity.

It must be pointed out that the transfer of a large share of the marketing function to producers does not do away with the cost for marketing. The economies to be realized are those resulting primarily from scale of operation (that is size of sale and volume). Transportation, storage, spoilage, and other costs are still part of the marketing cost which must ultimately be paid for by the purchaser. However, a reduction in costs because of the elimination of variability, fewer small-lot purchases, and variability in services from many vendors could be realized by dealing with Hawaii producers who would then be in a competitive position to bid successfully for Armed Forces contracts.

Timeliness: The Army as well as the other armed services are faced with filling specified supply needs. It is not satisfactory if only part of the requirements are met occasionally or met only if other outlets do not absorb all of the available product. Troop feeding, particularly, sets some rather specific patterns of supply. Resales through commissaries, clubs, and post exchanges are more flexible in their supply requirements. The Armed Forces housewife shopping in the commissary reacts about in the same way as her

civilian counterpart--that is, she will substitute cauliflower for broccoli or pork for beef if she does not find the former on the shelves. For troop issue, however, even though substitutions are practical, these must be well preplanned and suitable to the tastes and preferences of troops being served. Troop feeding is a science which the Armed Forces have perfected to a high degree of efficiency. However, troop feeding always has and always will depend upon adequate preplanning and timely operational support. For Hawaii producers to fit into this scheme will require organization of production, marketing, and related pricing to meet the specific military mess requirements.

Regularity: This factor is probably not much different in some respects from timeliness. However, there is the additional possibility that Hawaii producers would not necessarily supply a given commodity over the whole year or perhaps the whole supply in any one season. It does mean that whatever quantity producers would choose to contract would in fact be available in specified amounts and on specified times to the Armed Forces whenever a contract is consummated.

## PART II

### Armed Forces Requirements

#### Armed Forces Requirements for Selected Food Products in Hawaii

An important economic concern to both the Armed Forces and civilian leadership in Hawaii has to do with the impact of local military buying on the State's economy. Dollars spent by the Armed Forces in the Hawaii market for Hawaii-produced goods and services have a decided impact upon the economy. In terms of Hawaii-produced food purchases the impact is probably most directly felt by the various agricultural industries in the State. (More about this later.)

If more military purchasing of locally produced agricultural commodities is to be realized, it is important to determine how much of the aggregate (military and civilian) supply current Armed Forces procurement represents. One problem immediately arises because not all military inshipments are accounted for in the aggregative statistics for the State of Hawaii. In some instances where quantities of selected commodities are shipped by military transport, these can be added to the quantities reported by the Hawaii Crop and Livestock Reporting Service.<sup>2/</sup> In other instances where the Armed Forces purchase from local vendors and where the Armed Forces use commercial shipping, these quantities are already included in the annual statistics. A useful means for arriving at aggregate military requirements for selected food items is to assume that the per capita requirements of any one or combination of the services are fairly representative of the per capita requirements of all of the armed services located in Hawaii. In a study conducted by the U. S.

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<sup>2/</sup> Statistics of Hawaiian Agriculture, Hawaii Crop and Livestock Reporting Service.



Army in Hawaii during the summer of 1965 this procedure was used. A determination was made of the per capita requirements of the U. S. Army and Air Force in Hawaii for selected food items. The food items chosen were those more or less commonly produced in Hawaii.

**Estimated Annual Requirements for Selected Food Commodities by USARHAW**

There are four categories of food consumers within USARHAW (U. S. Army Hawaii). These are: troops (troop issue), resale (commissary), resale (clubs), resale (post exchanges). By far the largest uses are for troop issue and commissary resale. Three classes of food products were considered in the study: (1) selected livestock products, (2) selected vegetables, (3) selected fruits and nuts.

**Selected Livestock Products**

The livestock products included in the survey were those which were known to be produced in significant quantities in the State of Hawaii. The list follows rather closely the commodities presented in Part I of this report.

Table 9. Estimated current annual consumption requirements of selected livestock products, U. S. Army Hawaii, 1964

Livestock products	Units	Outlets				Total
		Troop issue	Resale			
			Commissary	Clubs	Post exchange	
Beef and veal	1,000 lbs.	1,802	2,870	569	540	5,781
Pork	1,000 lbs.	879	777	39	144	1,839
Chicken meat	1,000 lbs.	305	860	184	90	1,439
Milk	1,000 gal.	262	988	37	150	1,437
Eggs	1,000 doz.	668	614	68	116	1,466
Fish (Fresh)	1,000 lbs.	152	595	22	<u>1</u> /	769

1/ Unknown.

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

**Vegetables**

Sixteen vegetables were chosen for inclusion in this study. This does not mean that other vegetables are unimportant in either troop feeding or for resale purposes. These were chosen because they are more or less typical

produce items used by the Army or else are items produced in significant quantities in Hawaii and might therefore have some place as either a substitute or regular issue item in troop feeding or for resale. Table 10 shows the 16 items and their relative consumption in Army and Air Force food distribution channels.

Table 10. Estimated current annual consumption requirements of selected vegetables, U. S. Army Hawaii, 1964

Vegetables	Outlets				Total 1,000 lbs.
	Troop issue 1,000 lbs.	Resale			
		Commissary 1,000 lbs.	Clubs 1,000 lbs.	Post exchange 1,000 lbs.	
Beans, snap	88	37	2	0	127
Broccoli	66	5	1	0	72
Cabbage, head	185	248	31	10	474
Carrots	188	118	16	10	332
Celery	230	170	16	12	428
Corn, sweet	0	8	0	0	8
Cucumbers	51	146	5	0	202
Eggplant	6	14	0	0	20
Lettuce	196	509	79	0	784
Onions, dry	170	309	22	60	561
Peppers, sweet	43	51	4	0	98
Potatoes	2,746	1,900	265	360	5,271
Squash	7	25	0	0	32
Sweetpotatoes	85	11	0	0	96
Tomatoes	137	428	67	120	752
Watercress	0	17	3	0	20

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.



Figure 7. Fresh produce storage. Storage facilities for fresh vegetables are critically important in product quality maintenance. Above, watercress is examined for freshness in an on-farm storage cooler. Below, vegetables stored at a major Armed Forces cold storage warehouse.

**Fruits, Nuts, and Melons**

The category of fruits and nuts includes ten items. Included in the ten items are two melons, two nuts, and six fruits. Table 11 shows the ten items for the four major types of outlets in the USARHAW food merchandising and distribution system. It should be noted that some items are listed as zero under clubs or post exchange. In these situations the sample periods did not show movement of these products or else, as in the case of the post exchange, specific information was inadvertently left out. Post exchange fruit quantities are, therefore, unknown.

Table 11. Estimated current annual consumption requirements for selected fruits, nuts, and melons, U. S. Army Hawaii, 1964

Fruits, nuts, and melons	Outlets				Total
	Troop issue	Resale			
		Commissary	Clubs	Post exchange	
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>
Avocados	0	29	1	<u>1/</u>	30
Bananas	187	286	7	"	480
Cantaloupes	77	143	0	"	220
Coconuts	0	6	0	"	6
Limes	0	7	6	"	13
Papayas	12	105	32	"	149
Macadamia nuts	0	0	1	"	1
Oranges	148	436	13	"	597
Tangerines	32	105	0	"	137
Watermelons	86	222	0	"	308

1/ Unknown.

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

**Sources of Supply**

Insofar as this study was concerned, the crucial problem was to determine, as accurately as possible, the sources of the food products used by the USARHAW command. The problem of source was the most difficult issue to resolve. The source estimates made are those gleaned from available records and statistical data. The central problem concerning source is related to the way in which the market is organized and in the way it functions. The U. S. Army in Hawaii

as well as other major wholesale demanders for Hawaii-produced food products purchase their requirements in the Honolulu wholesale market or else have them shipped directly from mainland wholesale supply points. Many of the items purchased in the local market may or may not be locally produced. Wholesalers and jobbers, just as major retail buyers, may secure part or all of their supplies from mainland sources. Therefore, even if the Army buyer purchases food products on the local market he may in fact be purchasing Mainland-produced products. What occurs is that produce handled in this way has to go through an additional marketing step which is likely to drive price higher and cause purchasers, both military and civilian, to look directly to mainland producers and wholesalers for their product requirements. Ultimately, these market influences will cause the market for Hawaii-produced products to shrink.

Similarly, Hawaii producers are currently dependent upon a large number of wholesalers to market their comparatively small volume of products. Required margins for handling, processing, selling, and profit are necessarily high. In addition to the high costs for marketing, the producer is faced with a number of other difficulties which put him progressively at greater disadvantage in competing for available market. Among these difficulties are the following:

1. There is often no assurance that the producer will have a market when the product is ready for sale.
2. There is a basic lack of knowledge as to specific requirements for product, in terms of season, quality, or quantity. The producer currently seems to produce "in the dark" with the hope that when his crop matures, price and market will be there to "bail him out".
3. There is little, if any, real reason to suppose that Hawaii's intermediate marketers (wholesalers, jobbers, and order buyers) are particularly concerned with expanding demand for Hawaii-produced commodities. The real incentive is margin--which may or may not be better from Hawaii-produced products.
4. The farmer is unorganized, thus individuals or loosely organized, small-volume associations or cooperatives try to bid for sales in a highly organized retail market system. In other words, the farmer does not currently have an effective spokesman at the bargaining table, nor does he currently have enough market power or control of supply from production through selling, to effectively bid for market share and price.
5. Producers are not currently oriented to a concept of market coordination where supply is related to a specific set of market outlets and where, in fact, a system of integration from production through selling is practiced.
6. Producer costs for some factors of production, particularly supplies such as fertilizer, pest control materials, packaging materials, and fuels, are higher than those of their mainland competitors. Some of these costs effectively reduce the benefits derived from transportation cost differences of mainland inshipment.

This all points to the need for finding greater efficiencies in the market structure and for further developing efficiencies at the farm level. For the Army, or for that matter, major retailers, to buy locally produced products will in the short run depend upon competitive product quality, quantity, and price. If the short-run problem is not resolved, the long-run results will be a continued shrinkage of locally produced commodities in the retail market. The symptoms of shrinking market shares for Hawaii-produced commodities are evidenced in the tables and charts presented in Part I of this report.

**Sources of Livestock Products**

The sources of livestock products presented in Table 12 are the best estimates available and were determined from available Army (USARHAW) records.

Table 12. Sources of selected livestock products supply for U. S. Army and Air Force in Hawaii, 1964

Item	Units	Requirements <sup>1/</sup>	Off shore purchases		Local purchases	
			Amount	Percent	Amount	Percent
Beef and veal	1,000 lbs.	5,781	4,129	71	1,652	29
Pork	1,000 lbs.	1,839	1,458	79	381	21
Chicken meat	1,000 lbs.	1,439	1,155	80	284	20
Milk	1,000 gal.	1,437	62	4	1,375	96
Eggs	1,000 doz.	1,462	678	46	784	54
Fish (Fresh)	1,000 lbs.	769	187	24	582	76

<sup>1/</sup> Estimated USARHAW Annual Requirements, Table 9.

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

It is evident that some of the livestock product purchases made by USARHAW in the local market are not from local production. The prime example is pork. There are no locally established packing plants which slaughter pork qualified to sell to the military. What probably does occur is that some products are purchased from local vendors who secure their supply from the Mainland. The two plants in Hawaii which meet Federal standards do not slaughter pork, but these plants do process pork and pork products shipped in from the U. S. Mainland.

Some quantities of locally produced chicken meat and all eggs and milk required for commissary and club resale are purchased from local sources.

Sources of Vegetables

Vegetable supplies are from both mainland and local sources. Table 13 shows where the 16 different vegetable items were purchased by Army buyers in 1964. Three items, head cabbage, lettuce, and tomatoes, were purchased primarily in the local market. More than 50% of carrots, celery, dry onions, and Irish potatoes were purchased on the Mainland. Here again as with live-stock products it is difficult to determine the actual production source of Hawaii-purchased items. The exception is the minor item of watercress which is produced entirely in Hawaii.

Table 13. Sources of selected vegetables supply for U. S. Army and Air Force in Hawaii, 1964

Items	Total estimated requirements	Mainland purchases		Local purchases	
		Amount	Percent	Amount	Percent
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>		<u>1,000 lbs.</u>	
Beans, snap	127	87	69	40	31
Broccoli	72	66	92	6	8
Cabbage, head	474	67	14	407	86
Carrots	332	240	72	92	28
Celery	428	374	87	54	13
Corn, sweet	8	0	0	8	100
Cucumbers	202	0	0	202	100
Eggplant	20	0	0	20	100
Lettuce <sup>1/</sup>	784	361	46	423	54
Onions, dry	561	336	60	225	40
Peppers	98	0	0	98	100
Squash	32	7	22	25	78
Sweetpotatoes	96	85	89	11	11
Tomatoes	752	0	0	752	100
Watercress	20	0	0	20	100

<sup>1/</sup> Includes both head and leaf lettuce (Manoa).

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

**Sources of Selected Fruits, Nuts, and Melons**

This group of items reflects mostly tropical fruits and therefore many of the items are almost wholly locally supplied (Table 14). Except for oranges and watermelons, all items are secured from local sources, and of these items except for cantaloupes, watermelons, and oranges all are probably locally produced. The point that needs to be made is that the military requirements for temperate zone fruits far outstrip requirements for tropical fruits. Apples, grapes, pears, and other items are purchased in large volume by the Armed Forces.

Table 14. Source of selected fruits, nuts, and melons for U. S. Army and Air Force in Hawaii, 1964

Items	Annual requirement 1,000 lbs.	Mainland purchases		Local purchases	
		Amount 1,000 lbs.	Percent	Amount 1,000 lbs.	Percent
Avocados	30	0	0	30	100
Bananas	480	0	0	480	100
Cantaloupes	220	0	0	220	100
Coconuts	6	0	0	6	100
Limes	13	0	0	13	100
Papayas	149	0	0	149	100
Macadamia nuts	1	0	0	1	100
Oranges	597	568	95	29	5
Tangerines <sup>1/</sup>	137	0	0	137	100
Watermelons <sup>1/</sup>	308	86	28	272	88

<sup>1/</sup> Highly seasonal.

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

**Aggregate Armed Forces Requirements**

In the study conducted by the U. S. Army in Hawaii during the Summer of 1965 it was found that the Army and Air Force accounted for between 8 to 10 percent of the quantities of the selected food items reported available in the civilian economy. Table 15 shows the amounts of the various commodities available as reported in the Statistics of Hawaiian Agriculture, and it also shows the amounts used by the Army and Air Force in both pounds and in percent of total reported civilian supply.



Table 15. Army and Air Force requirements as percent of total civilian supply, 1964

Items	Total civilian supply	Military use	Military as % of total	Estimated sources of purchases-pounds and percent		
				Mainland	% Mainland	% Local
	<u>1,000 lbs.</u>	<u>1,000 lbs.</u>	<u>Percent</u>	<u>1,000 lbs.</u>		
Beef and veal	55,504	5,781	10.4	4,129	71.4	28.6
Pork	22,251	1,839	8.3	1,458	79.2	20.8
Chicken meat	13,870	1,439	10.4	1,155	80.3	19.7
Eggs	16,222 <sup>1/</sup>	1,462 <sup>1/</sup>	9.0	678	46.4	53.6
Milk	131,140 <sup>1/</sup>	11,927 <sup>1/</sup>	9.1	514	4.3	95.7
Fruits	52,900	2,200	4.2	750	34.1	65.9
Vegetables	108,600	10,000	9.2	5,600	56.0	44.0
Potatoes	30,038	5,270	17.5	3,915	74.3	25.7
Vegetables, Less potatoes	78,562	4,730	6.0	1,685	35.6	64.4

<sup>1/</sup> Eggs, reported in 1,000 dozens; milk in 1,000 gallons.

Source: 1965 U. S. Army Survey, by authors and other members of the 322nd Civil Affairs Group, Summer 1965.

The exception to the 8-10 percent relationship was in fresh fruit, which may be explained by CONUS (continental U. S.) purchases of processed products (canned and frozen products) not included in the Army study. Similarly, the relatively smaller amounts of fresh vegetables (when Irish potatoes are extracted from the total) may also be accounted for by the processed product finding its way into the military dependent and troop food budget.

Assuming that Army and Air Force per capita consumption to be fairly representative of the per capita requirements for all services, it is possible to make estimates of probable total Armed Forces supply requirements. Table 16 shows the probable aggregate Armed Forces supply for 1964. The procedure used was to multiply the per capita Army and Air Force requirements by the average 1964 military population including dependents domiciled in Hawaii.

The presumption is that Armed Forces dependents buy almost all of their requirements in commissaries. This latter assumption may be somewhat presumptive in that fruit and vegetables (except potatoes) may be purchased in rather larger quantities directly from civilian supply sources.

Table 16. Estimated aggregate military supply requirements  
(Personnel and dependents, 1964)<sup>1/</sup>

Item	Army - Air Force purchases	Per capita Army and Air Force consumption	Estimated supply requirements military <sup>2/</sup>
	<u>1,000 lbs.</u>	<u>Pounds</u>	<u>1,000 lbs.</u>
Beef and veal	5,781	91.0	12,344
Pork	1,839	28.9	3,920
Chicken meat	1,439	22.7	3,079
Eggs	1,462 <sup>3/</sup>	23.0 <sup>3/</sup>	3,120
Milk	11,927	187.7	25,461
Fruits	2,200	34.6	4,693
Vegetables	10,000	157.4	21,351
Potatoes	5,270	82.9	11,245
Vegetables, Less potatoes	4,730	74.4	10,092

<sup>1/</sup> Estimated personnel and dependents January 1965: 135,648.

<sup>2/</sup> The military population in Hawaii for 1964 was estimated at 18.4 percent.

<sup>3/</sup> Dozen.



Figure 8. Product transportation. Open truck hauling is still in common practice for transporting fresh vegetables and other agricultural products in Hawaii. However, the practice is gradually giving way to the introduction of refrigerated vans, particularly for products shipped in from the Neighbor Islands.

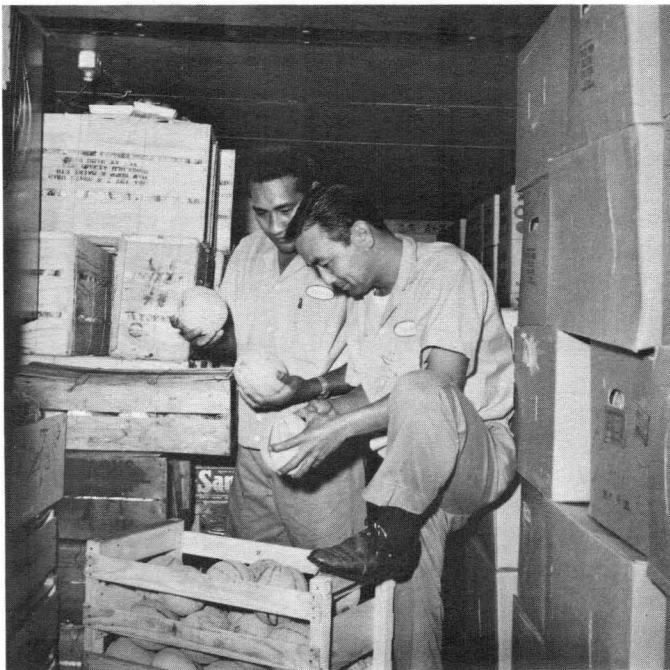


Figure 9. Product quality--An important sales determinant in the Armed Forces consumer market. Produce manager of an Armed Forces commissary inspecting Hawaii-produced melons for consumer acceptability. It is generally recognized that the Armed Forces housewife is essentially the same in her demands for product quality as is her civilian sister.

Table 17 presents comparative quantities of the selected food items as these appear to be allocated in the total Hawaiian market. In addition, the table shows per capita consumption for both military and civilian population as well as percentum breakdowns of the total quantities between military and civilian consumers. In Table 17 it is evident that the military per capita consumption of both fresh fruit and vegetables (except potatoes) is considerably lower than for the civilian population. Perhaps an additional reason for under-consumption in these areas (in addition to the reason already given) is that not much effort is made by both the military and civilian vendors to expand the demand for these products. It is probable that less effort is expended in the merchandising process to move locally produced fresh fruits and vegetables to the military than is the case for the food merchandising institutions at large.

Table 17 also shows that the Armed Forces use less than a proportionate share of fresh pork and about 19 percent of the total supply seems to be about the normal quantity of other meat consumed by the Armed Forces. Two reasons can be given for the difference in pork consumption. First, the Armed Forces may be using processed pork products which were not accounted for in this study--such items as prepared bacon, smoked hams, and canned sausage products; second, the sample taken in the survey may not have been adequate to fully measure the pork consumption (sampling error). In any event, there appears to be ample indication that the military sector of the market in Hawaii represents about 18-19 percent of total supply disappearance.

It should be noted that in Table 17 the Army and Air Force percent of supply shown are lower than those shown in Table 16. This is so because total market supplies, including the estimated quantities purchased off-shore by the Armed Forces are considered.

#### **The Ability to Supply Armed Forces Requirements**

The ability of local producers to supply some or all of any one commodity hinges, for the most part, on the capability of the producers or vendors to conform to conditions set forth in Part I of this report.

Taking the selected commodities item for item, the following comments are relevant:

Beef and Veal: Including 1964 estimated military inshipment of beef products, the State of Hawaii produces slightly over 40 percent of total supply. Of the total quantity, about 35-40 percent is federally graded and inspected, which is less than the amount of beef and veal required by the Armed Forces. Total estimated military requirement was 12,344,000 pounds, whereas the State's slaughter plants slaughtered about 10,000,000 pounds under federal certification in 1964.

The growth of the industry appears to have stabilized at around 26,000,000 pounds annually. Seemingly, any further growth would need to come from the supply side, namely, expanded livestock feeding, or from expansion of feeder cattle sales which in turn would require development of a feeder market. Foreign and mainland inshipments, including the portion purchased through central purchasing by the military represent about 60 percent of the current market supply. The share of market supply currently going to mainland and foreign suppliers does not appear to be weakening (Figure 6).

Table 17. Estimated market allocation of available supplies of selected commodities, Hawaii, 1964

Selected item	Estimated supply			Quantity <sup>1/</sup> available civilian	Per capita disappearance			Percent of total supply		
	Civilian market	Off-shore military	Total market		Total mkt. supply <sup>2/</sup>	Total military <sup>3/</sup>	Civilian <sup>4/</sup>	Military <sup>5/</sup>	Civilian	Army and Air Force
	1,000 lbs.	1,000 lbs.	1,000 lbs.	1,000 lbs.	Pounds	Pounds	Pounds	Percent	Percent	Percent
Beef and veal	55,504	8,814	64,318	51,974	87.2	91.0	86.1	19.19	80.81	9.0
Pork	22,251	3,104	25,355	21,153	34.4	28.9	35.1	15.46	84.54	7.3
Chicken meat	13,870	2,472	16,342	13,186	22.2	22.7	21.9	18.84	81.16	8.8
Eggs <sup>6/</sup>	16,222 <sup>6/</sup>	1,448 <sup>6/</sup>	17,670 <sup>6/</sup>	14,550 <sup>6/</sup>	24.0 <sup>6/</sup>	23.0 <sup>6/</sup>	24.2 <sup>6/</sup>	17.66	82.34	8.3
Milk	131,140	1,092	132,232	106,774	179.2	187.7	177.3	19.25	80.75	9.0
Fruits	52,900	1,600	54,500	49,807	73.9	34.6	82.7	8.61	91.39	4.0
Vegetables	108,600	11,957	120,557	99,206	163.4	157.4	164.8	17.71	82.29	8.3
Potatoes	30,038	8,355	38,393	27,148	52.0	82.9	45.1	29.29	70.71	13.7
Vegetables, Less potatoes	78,562	3,593	82,155	72,063	111.4	74.4	119.7	12.28	87.72	5.8

<sup>1/</sup> Civilian market supply less local military purchases.

<sup>2/</sup> Total population estimate--all persons civilian and military: 737,787 (1964).

<sup>3/</sup> Includes estimates for dependents (1964).

<sup>4/</sup> Estimated per capita supply allocation for civilian population: 602,139 persons (1964).

<sup>5/</sup> Estimated per capita supply allocation for all military services: 135,648 Armed Forces and dependents (1964).

<sup>6/</sup> Eggs in dozen.

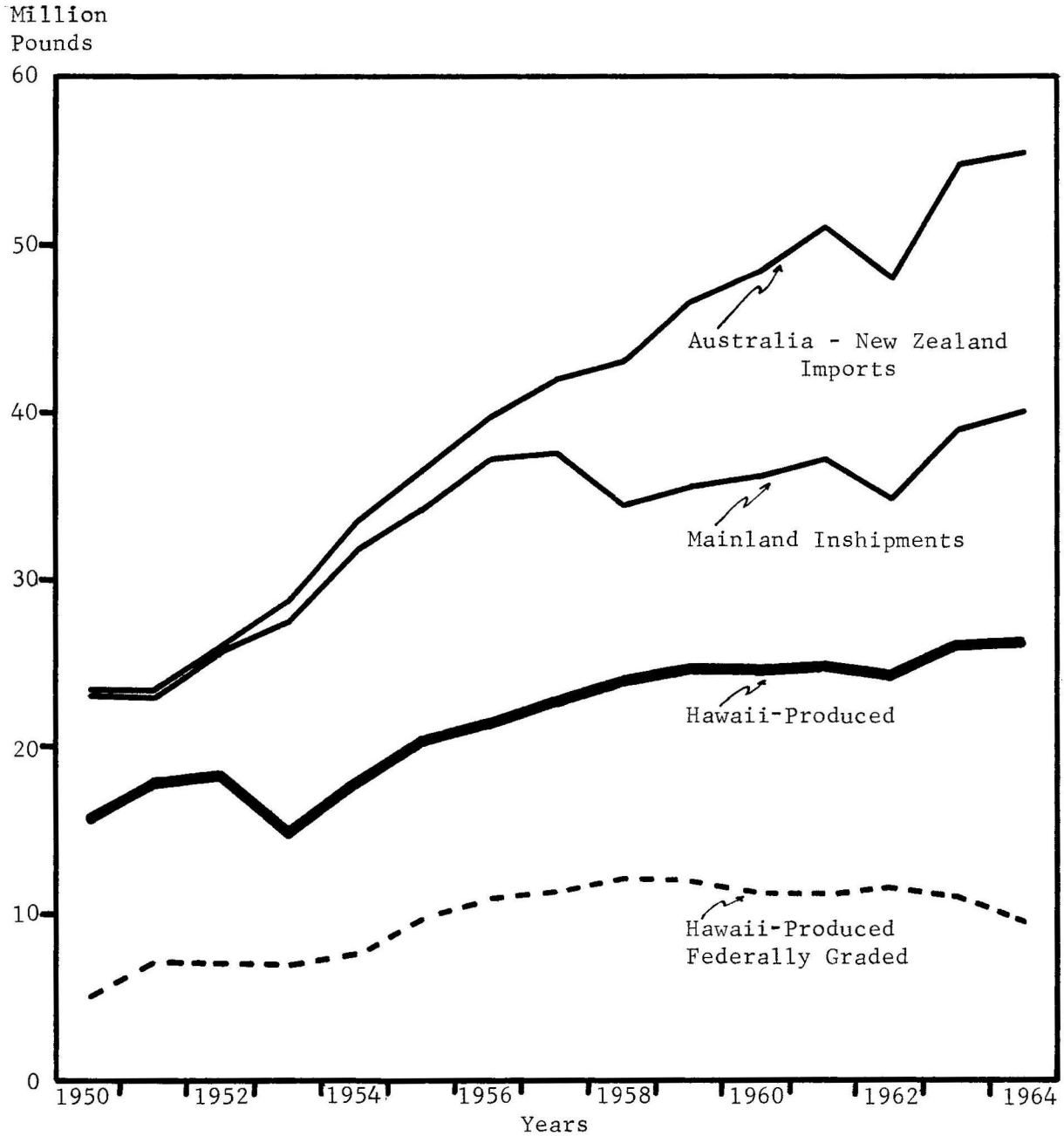


Figure 10. Sources of civilian beef supply, 1950-1964.

Note: Figure does not show inshipments by the Armed Forces. In 1964, the Armed Forces accounted for an estimated additional nine million pounds.

Source: Edmund R. Barmettler and Brian A. Lockwood, Some Impacts of Foreign Beef and Veal in the Hawaii Consumer Market, University of Hawaii Cooperative Extension Service Circular 407, April 1965.

Pork: The share of market for locally produced pork is shrinking. Currently, civilian and Armed Forces inshipments appear to take about 65 percent of the fresh pork market. Feed costs, small-scale operations, and other problems of efficiency appear to be squeezing island pork producers. It is likely that there will be a continued decline in the share of market for this industry over the foreseeable future.

Chicken Meat: There has been a slight decline in the market share of Hawaii-produced poultry. Economics in poultry operations, feeding efficiencies, and new technology aid in keeping the industry competitive with mainland suppliers. There is a preference for the locally produced product over the chilled or frozen inshipped products.

Eggs: Changing technology, large-scale operations, and improved management all have contributed to the growth of the egg industry. Currently, 95 percent of the civilian market is supplied from local production. Including military inshipment, about 86 percent of the market is supplied from local production. Further growth in this industry appears both feasible and probable.

Milk: Almost 100 percent of the Armed Forces requirements for fresh milk are currently supplied by the local dairy industry. However, some indications do exist that the requirements for some processed products are being met through mainland suppliers. Included are ice cream mixes and cultured products.

Fruits: The most important thing that can be said for the selected fruits is that more intensive market development (merchandising) needs to take place if sales to the Armed Forces market is to increase appreciably. Currently, costs of tropical fruits appear to be such that they are shunted out of this potential market. Intermediate marketing costs need to be reduced if these fruits are expected to substitute for temperate zone fresh fruits or canned and frozen fruit products. The potential exists for both increased sales to substitute for temperate region fruits as well as for increasing military per capita consumption of tropical and subtropical fruit items. The share of market held by Hawaii producers has been growing. This growth is due primarily to export of fresh pineapple and papaya, and perhaps in the future may include mango, avocado, banana, and other fruits successfully produced in Hawaii. It is believed that Hawaii producers can successfully bid for an additional share of market by the development of efficiencies at both the on-farm and intra-market levels of operations.

Vegetables: Vegetable production has held relatively constant. The share of market, however, has been declining slightly. Here, as with fruits, there appears to be opportunity for market expansion. It was estimated that the military used about 75 pounds of fresh vegetables (selected group) per capita annually. This compares to 120 pounds in the civilian economy. This difference of about 45 pounds per person would amount to about six million additional pounds, if the Armed Forces consumed fresh vegetables on a par with the civilian sector of the market. Another way of saying this is that there is a market potential of about two hundred 30,000-pound carloads to bring the two segments of the economy on a par. It is also probable that if the Hawaiian producer were organized to serve the

Armed Forces market more efficiently in order to compete on price more effectively, the civilian market would offer additional opportunities for sale. A change of one pound per capita consumption of local product as against inshipments would result in the production potential of about 24.5 carload equivalents to the Hawaii producer. (This excludes Irish potatoes.) Hawaii does have the land, physical environment, and production management capabilities to produce increasing amounts of both fruits and vegetables. The big problem seems to occur in the market organization of the producer. There seems to exist a false premise that a large number of independent sellers in the market makes for greater competition. Little, if any, real attention is given to the economies (efficiencies) to be realized from modern market coordination, integration, and modern technical inter- and intra-market innovations.

### PART III

#### Survey: Problems and Attitudes - Sellers, Buyers, and Agencies in the Hawaiian Market

One important phase of the study conducted by the U. S. Army Hawaii was a survey of opinions of producers, vendors, Army procurement personnel, and civilian and military agencies in Hawaii. The survey was conducted in two parts. The first part attempted to determine viewpoints of civilian suppliers (producers and vendors) concerning their ability to increase sales to the Armed Forces. The second part of the survey was designed to secure civilian and Armed Forces viewpoints concerning requirements, conditions of sale, and recommendations for adjustment in the Hawaiian market to increase sales to the Armed Forces.

#### Suppliers - Problems and Attitudes

At the outset it can be stated that the suppliers gave full support to this study. It made little difference whether the respondent was a producer, wholesaler, or jobber; each was willing to add to the survey as it pertained to the firm represented.

There were 88 firms included in the survey. Half of the firms were doing business with the Armed Forces currently, the other half may or may not have done business with the Armed Forces in the past.

For the most part the comments made by the respondents were directed at the Army and Air Force; however, it is probable that most respondents differentiated very little from one service to the other. Except in some isolated instances the attitudes and beliefs held by vendors and producers could also apply to the Naval services.

#### General Comments

1. The Armed Forces buy locally only when other supply sources are short.

The idea that seems to prevail is that the Armed Forces use local supply resources only when they cannot fill their needs



from central purchasing or from mainland sources, where it is believed prices quoted do not include transportation costs to Hawaii.

2. The Hawaii producer or vendor is considered a less capable supplier of goods and services than the mainland vendor or producer and that "Hawaii suppliers are treated as step-children" in bidding for a share of the military market.
3. Master menu too inflexible.

Suppliers visualized the troop-feeding program of the Army (master menu) as a device which excludes the possibility of substitution of locally produced food items. It should be pointed out that substitutions require considerable preplanning and, further, the Army does not currently project its needs sufficiently long in advance so that local production can be geared to supply troop requirements. (See comments on "Intent to Buy".)

4. Army buyers are not familiar with local production and marketing problems.

The vendors and producers commented that the Army is not particularly concerned with the problems of local suppliers, and this lack of understanding prohibits some sales potential which might be realized if the Army were to recognize production and marketing limitations. Particular reference was made by producers concerning sufficient lead time<sup>3/</sup> to produce for the Armed Forces market.

5. Army personnel should be educated to use locally produced commodities.

It was felt that military mess personnel and Armed Forces commissary consumers should be educated in the use of certain locally produced commodities. Particular reference was made to fruits and vegetables which can be grown in abundance and might satisfactorily substitute for mainland-grown commodities. These items include leaf lettuce, cabbage, watercress, and papaya, among others.

6. The Army is more interested in price than it is in quality.

This comment seems to indicate that the Army's specifications on grade are rather broad. It was not fully determined how broad the spread in grade was; however, this seeming latitude is not extended into livestock products. The Army is rather specific as to meat, milk, eggs, and poultry meat grades. For fruits and vegetables there may be times when No. 2 or even

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<sup>3/</sup> Lead time may be defined as the period required to plant and harvest a crop. Lead time will vary for each crop, from 60-80 days for lettuce to 180-200 days for sweetpotatoes.

market quality grades are acceptable for messing operations. (See comments on quality conformance - Part I of this report.) Price does indeed play an important role in Army buying as evidenced by the purchasing objectives also stated in Part I of this report.

7. The Army should follow a contracting system similar to that currently practiced by the Navy.

Producers particularly tend to favor the idea of advance contracting for specific items. The Navy currently practices contract purchasing, and 11 items are included in the normal quarterly contract. (Table 1.) Contract purchasing is considered a most effective means for providing producers with necessary lead time to produce quantities of product for the Armed Forces. Wholesalers and jobbers do not appear to be as concerned about advance contracting as do producers or primary processors. The producer and processor both require some assurance that a market for products will exist at time when they're ready for sale before production begins. The vendor, on the other hand, may go to mainland suppliers if local commodities are in short supply. Apparently, this latter procedure is followed to a considerable extent by local wholesalers in supplying the Army with short-run supply requirements. The producer and processor favor a contract which will stipulate locally produced products.

#### Communications

A second area of comment had to do with problems of communication between the Armed Forces purchaser and the civilian supplier.

1. Central negotiations and information facilities.

It was believed by a number of firms that some central market information and contract negotiating facility should be developed. The idea prevailing is that there is currently insufficient information on specific Armed Forces (military) requirements for effective contract negotiations to take place. It is also believed that the purchasing system should be standardized for all services through a central negotiations and information facility.

2. Turn-over of military purchasing personnel.

The economic loss to local suppliers through reduced sales to the military when top-level personnel changes are effected is viewed as serious. There was no effective way to determine if an actual reduction in purchases has resulted from change-overs. It is likely that this felt loss may be a result of having to deal with a new man rather than with real sales reduction.

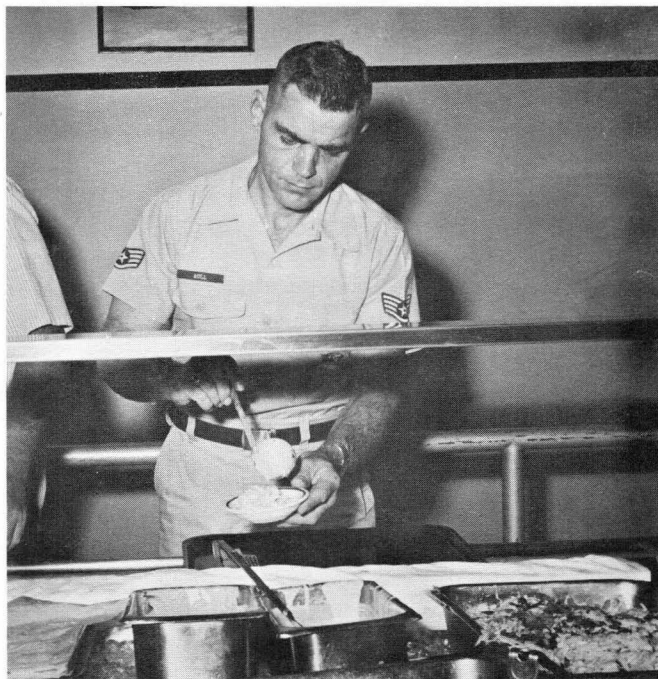


Figure 11. Final product acceptance. Hawaii-produced agricultural products receiving the final stamp of approval from the ones that really count--the Armed Forces consumer.

3. No opportunity to promote products through advertising and promotion at the military consumer level.

There is probably considerable worthiness in this comment in view of the relatively smaller quantities of locally produced fruits and vegetables marketed through Armed Forces channels when compared with per capita civilian consumption (Part II). The Armed Forces consumer (resale market) is not subjected to the same sort of display and other product promotion schemes as is the civilian consumer. This may reflect, in part, the smaller per capita consumption of Hawaii-produced fresh fruits and vegetables by the military population. Livestock products are consumed more or less on a par with the civilian consumer.

4. "Intent to Buy" publication viewed as ineffective.

The "Intent to Buy" is a publication of quantities required by the Army and Air Force, and is published anywhere up to three weeks in advance of actual delivery. Producers and processors particularly believe this is insufficient time to plan production to integrate the Armed Forces requirements in the production schedule. "Intent to Buy", it is believed, should be backed up by contracts and should be sufficiently in advance of delivery specifications to provide needed lead time required in production, processing, and delivery of the product.

#### Contracts

The third area of concern of suppliers had to do with condition of sales. Primarily this involved contract specifications. The general attitude of almost all respondents was that there was room for improvement in the amount of business done between the Armed Forces and local suppliers.

1. Suppliers must know military requirements in advance of production scheduling.

This comment is related to the one made above, concerning "Intent to Buy." A number of respondents, particularly producers and processors, believe that it is potentially possible to integrate production specifically with Armed Forces requirements. To do this, it is felt that a contract is required to assure the producer with a place to move the specified quantity contracted.

2. Condition of sales could be stipulated in contracts.

It is felt by the respondents that quantity, price, quality, package, and delivery specifications could be included in contract. Currently, the Army buys a number of fruit and vegetable items in the wholesale market without having an effective way to specify what it needs, except to reject what the market offers.

3. Contracts should specify Hawaii produce.

A comment of some significance has to do with an earlier attempt by the Army to contract for fresh fruits and vegetables. As far as the Army is concerned, this experiment failed. According to vendors, the reason it failed was that the Army failed to specify that the products must come from local production. It is generally felt that, had the Army so specified, the producer would have had a chance to bid for a share of the Army requirement. As it was, they report, the vendor bid for contracts but filled them from mainland sources.

4. Contracts should be enforced.

A comment made by the suppliers was that contracts should be enforced. The idea here is that the market system will not stabilize effectively unless the contract is held inviolate. The only exception to this should be "Act of God" type conditions. It is felt that when contracts are used they generally favor the Armed Forces. Vendors report that contracts often stipulate that prices will follow down trends but are not written to compensate for price rises above those stipulated originally in the contract.

#### Transportation and Freight

The fourth general area of concern had to do with transportation and freight costs. It is generally felt by vendors that they are placed at a disadvantage in bidding against central purchasing from mainland supply sources. (See Part I concerning central purchasing.) The suppliers feel that mainland price quotations do not include a number of costs when compared to Hawaii-delivered price for the same or similar products.

1. Mainland price does not reflect fair comparison to Hawaii-delivered price.

Suppliers feel that costs for transportation by military or common carrier are not adequately reflected in the mainland price paid for commodities.

This point was not cleared up in this study. Much more research is required to determine the actual cost of shipping and other services added to product after purchase from mainland sources.

2. Local Armed Forces hauling and storage costs not computed in price of mainland product.

The local supplier feels himself further disadvantaged by the fact that hauling from Armed forces piers in Honolulu and storage of products in military reefers and warehouses is not charged to the price of the product.

The Hawaii supplier is required to deliver to the Armed Forces at specified locations and must necessarily make these charges against price in selling to the Armed Forces.

3. Spoilage costs not considered adequately.

The Hawaii producer has his product graded at point of delivery. Mainland products are inspected and graded at point of purchase. It is felt that the Armed Forces do not adequately allow for spoilage which it suffers on mainland purchases when making price comparisons between Hawaii and mainland produce commodities, primarily fruits and vegetables.

**Armed Forces - Problems and Attitudes**

The Army as the buyer appears also to have some rather specific attitudes and problems in dealing with local suppliers.

1. Hawaiian agriculture difficult to deal with--primarily in fruit and vegetables. Lack of organization.

Army personnel believe that Hawaii agricultural business people are poorly organized. There are too many small operators to deal with in the fruit and vegetable industries, both at production and distribution levels. There is no effective industry spokesman or group to pull the industry fragments together in such a way that the Army (or Armed Forces generally) can effectively bargain.

2. The Hawaiian agricultural industry (fruits and vegetables) lacks management capacity.

The Army, in dealing with local distributors and producers, has come to the conclusion that sound business judgement and efficient economical agricultural business operation do not exist and, therefore, Hawaiian agriculture cannot be competitive with mainland supply sources.

3. The fruit and vegetable industry lacks efficient distribution capabilities.

This observation by the military is probably related to the first two items listed. It obviously concerns organization and operational management features. Many small firms supplying a large-scale user, such as the Army, Air Force, or Navy, are likely to leave a poor impression of the distribution system in Hawaii.

4. The Army is treated as a second-class customer.

The Army feels that it does not receive the attention in the market which it merits. The suppliers on the other hand are reluctant to offer more service without a more binding commitment on the Army's part, for goods and services, than is currently practiced. The supplier is also reluctant to jeopardize existing civilian outlets in favor of the occasional military sale.

5. Product quality, price, and variety highly variable.

The Army contends that Hawaii products lack quality and service standards to which the Army may place planning significance. Quality and prices are highly variable, and preferred products are often not available from local industry.

**Agency Comments**

There are a number of agencies, both public and private, which have long been concerned about improvements in the agricultural sector of the State's economy. Included are the State Department of Agriculture, the Department of Planning and Economic Development, the Department of Transportation, and others. In addition, there has been a vast amount of research and extension work done in production, technology, and economic analysis of Hawaiian agricultural production and distribution by the University of Hawaii's College of Tropical Agriculture. These agencies and others not listed are available to work with military or other groups within or outside the State to advance the level of the total economy generally, and the agricultural economy particularly.

1. Coordination Needed.

It is strongly contended that because of the limited market alternatives for many of Hawaii's agricultural products, there is a serious need for production and marketing coordination. Currently, there are no alternatives except the local market for meat, milk, eggs, many vegetables, and fruits. In order to produce at prices which will return some normal profit to producers and others who provide product services, and yet will not exclude the local product from the market by more competitive shipments, coordination of supply to demand is important.

2. More Information Required.

In order to coordinate supply and demand there must be an improvement in the amount, type, and specificity of information. The Army must know more accurately the product volumes, quality, and price it is able and willing to accept, and must know this information sufficiently in advance so that producers may integrate the Armed Forces requirement into production schedules through some system of contracting. At the same time the Armed Forces must be assured of a dependable source of supply. Producers must keep the Armed Forces or other demanders informed of product availability sufficiently long in advance so the military can include locally produced commodities in troop issue and commissary channels.

3. More Efficiencies Required in both Production and Marketing.

In order for Hawaii producers to secure a larger share of the total Hawaiian market, including increased sales to the Armed Forces, they must be able to compete with mainland suppliers. Competition for market includes the ability of producers to assure supply dependability, product variety, quality, adequate processing, packaging, delivery, and, most important, competitive pricing. Farmers should contract directly with the military through their own organization or through some sort of farmer bargaining agent. Currently, there appear to be costs incurred in the market place which have driven the Armed Forces and other major retail buyers out of the local market. In order for this trend to be reversed, efficiencies must be instituted which will recapture these outlets for locally produced product sales.

4. Producer Organization Essential for Development.

Producers individually are seldom able to compete in a fashion fully satisfactory to the major buyers of locally produced food commodities. Some sort of organization, such as a cooperative marketing association, cooperative bargaining association, or other corporate entity which can aggregate the full productive capacity of Hawaii's agricultural producers, is needed. It is visualized that such an association of producers could institute efficiencies which would enhance Hawaii's producer competitiveness in the market. Currently, there are too many individual suppliers of all sorts, none of whom are effectively able to fill the requirements of major retailers and military buyers. An effective producer organization could provide services currently available only from mainland vendors, or, at high costs, from vendors in Hawaii.

5. Education Required.

The use of locally produced commodities, including many fruits and vegetables, may not be common in the diet of mainland soldiers and military dependents. Perhaps an educational program showing how to use pineapple, papaya, avocado, leaf lettuce, watercress, eggplant, broccoli, and others in cookery would help expand the demand for these products.

Army procurement people should also have access to information which will lead them to have a better understanding of local production, marketing, and product services. Currently, it is believed that the Army does not have a good image of Hawaiian agriculture.

Civilian agencies leaders are also of the opinion that the Army does not make adequate use of existing services



such as: inspection, grading, and statistical reporting. Procurement people need to be apprised of these services.

#### **Further Research Needed**

The agencies are strongly in favor of further research to determine ways and means for increasing sales of local commodities to the military.

### **PART IV**

#### **Agricultural Production and Market Contracting to Satisfy Armed Forces Requirements**

The nature and rate of change in the food handling and retailing industries in Hawaii should challenge Hawaii's farmers and processors to find new and improved ways to move their goods and services to the consumer. The evidence presented in Parts I and II of this report shows amply that Hawaii's agricultural and food marketing industries must seek ways to improve their competitive ability if they wish to hold onto their proportionate share of the market or, for that matter, hope to increase their share.

Hawaii's farmers, food processors, and food merchants are evidently not so far removed from mainland supply and price-making forces that they need not be concerned. It is with the mainland supplier of goods and services that Hawaii's producers and vendors must compete. The trend in Hawaii has been for increased large-scale merchandising of food products in the civilian sector of the economy. Estimates made by knowledgeable persons in the Hawaii Cooperative Extension Service indicate as much or more than 60 percent of Hawaii's food products are marketed by food chain stores. These firms are looking more and more to mainland supply sources for many products successfully produced in Hawaii. The Armed Forces stationed in Hawaii have food supply and food service requirements much like these major retailers.

#### **Trading with the Armed Forces of the U. S. A.**

In Parts I and II of this report the attempt was to show the current ability of the Hawaiian food production and food distribution industries to meet the required conditions of the Hawaii market. The market in this frame of reference is meant to include the Armed Forces of the United States. Particular attention was paid to the ability of local food production and distribution industries to serve the requirements of the Armed Forces.

In order for Hawaii's producers, processors, and vendors to deal effectively with the Armed Forces the conditions cited in Part I of this report are relevant. Further, any firm interested in dealing with the Armed Forces must do so according to a set of rules, which by intent, was designed to protect both the buyer and seller of goods and services. This does not mean that a perfect system of business relationships has been developed but rather that a workable system has been evolved out of experiences over a long time.

## Legal Aspects

The United States as a sovereign has inherent powers to enter into contracts with firms or individuals to carry out its governmental functions and obligations. In the case of the Armed Forces of the United States, this power to enter into contracts is exercised by designated personnel. The persons so designated are governed by Armed Services Procurement Regulations (A.S.P.R.), as well as certain other regulations and statutes depending upon the nature of goods or services supplied and the conditions under which the contract is consummated.

## Types of Contracting

The Armed Forces in Hawaii normally do business with local firms and individuals under the following types of contracting arrangements:

1. Fixed-Price Contracting: This involves at least three variations:
  - a. Firm-price, where the price is fixed over the whole of the contracting period and where the vendor is required to deliver at the price stipulated.
  - b. Fixed-price with escalation clause, where the price is adjusted up or down and the vendor is required to deliver according to some formula of current market price.
  - c. Fixed-price, but providing for renegotiation or redetermination of contract price, where the selling price is redetermined regularly or on some basis agreed to by the parties to contract.
2. Cost Reimbursement Contracting: This sort of relationship also has at least three variations:
  - a. Cost plus a fixed fee; the contract specifies a fee which is added to the cost of producing the good or service.
  - b. Cost reimbursement (no fee); the contract stipulates price as the cost of producing the good or service.
  - c. Cost sharing; the contract stipulates the amount or percentage of cost to be assumed by the parties to the contract.
3. Incentive type contract: This sort of contracting rewards the contractor for efficiencies and may penalize him for inefficient operation. Usually the incentive clause is built into the contract by formula.

The nature of the contracting arrangement ultimately made between parties will depend upon the ability of the particular system to conform most nearly to the multilateral requirements of the parties involved, the product or service to be provided, and the unique environmental conditions under which the contractual arrangement is to be made operative.

## Contracting Procedures

Contracts between the Armed Forces of the United States and Hawaii producers, processors, and vendors are initiated by (1) formal advertising for sealed bids, or (2) by negotiation.

1. **Solicited Bids:** The normal requirement imposed upon the Armed Forces' buyer under the solicited sealed bid arrangement is that full and free competition must be assured. Full and free competition has been construed to mean that the Armed Forces contracting officer must secure as many bids from qualified vendors as he deems necessary to assure the best possible advantage to the government. Included in this concept are the factors of price, quality, quantity, service, and such other conditions as are necessary in military supply operations.

The steps in formal advertising for sealed bids for supply contracts normally follow a pattern as outlined below:

- a. Invitation for Bids: The Armed Forces agency distributes information to prospective bidders through authorized communications media. Information given usually sets forth the quantity of a good or service desired, specifications, and such other conditions of sale as are deemed essential to Armed Forces requirements.

Standard Form 33 (see Appendix I) is used by the Armed Forces to solicit bids from qualified vendors. In addition the agency may solicit bids by free advertising in newspapers, trade journals, and such other media as will fully inform potential bidders on requirements.

Paid advertising may also be used when authorized by proper authority.

- b. Submission of Bids: Bids are opened at a place and time specified in the solicitation. It is the responsibility of the bidder to assure that sealed bids are received at the place specified and before the time set for opening. A late sealed bid cannot legally be accepted or considered by the responsible contracting officer unless no award has been made and the delay of the bid is due to no fault of the bidder. No fault of the bidder, includes mishandling by the United States and unusual delays in the mails in getting the bid to the place specified.

A bid may be withdrawn by the bidder providing written notice has been received by the proper contracting authority prior to the time set for opening of sealed bids.

- c. Opening Sealed Bids: The Armed Services Procurement Act (10 USE 2305 b) requires that all bids shall be publicly opened at a time and place specified in the invitation for bids

The contracting officer may authorize the correction of obvious clerical mistakes and if clear and convincing evidence shows a mistake the contracting officer is generally authorized to permit the bid to be withdrawn. However, if it is not clear that a mistake has been made or if it is clear what the intended bid should be, a determination may be made to correct the bid and not permit withdrawal (see Appendix II for more specific information.)

- d. Awarding Contract: The contract will be awarded to the successful bidder. The successful bidder is the vendor, processor, or producer whose bid conforms to the stipulations set forth in the invitation to bid, is capable (responsible) of executing the provisions set forth in the contract, and whose bid will provide the maximum advantage to the Government of the United States.
2. Negotiated Purchases: Procurement by formal advertising has been the preferred method for securing needed goods and services by the Armed Forces. Even today, procurement by formal advertising is the rule and procurement by direct negotiations the exception. Negotiated purchasing, however, is used as a procurement technique under a number of circumstances by the Government. The exceptions to procurement by formal advertising are stipulated in (10 USC 2304 a) of the Armed Services Procurement Act. The following are cited:
    - a. Purchases not in excess of \$2,500.
    - b. Property purchased for authorized resale in commissaries. Suitable advance publicity of proposed purchase must be given whenever the probable cost of supplies to be purchased exceeds \$10,000. Fifteen days' notice is required if practical (10 USC 2304 d; ASPR, 3-208.2).
    - c. Perishable or non-perishable subsistence supplies.
    - d. Where it is impractical to secure adequate competitive bids.
    - e. Where formal advertising has produced unreasonable bid or bids.
    - f. National emergency.
    - g. Public exigency (fire, flood, explosion, etc.).
    - h. Personnel or professional services.
    - i. Services by a university or other technical institution.
    - j. Property or services to be procured and used outside the United States, its territories, commonwealth, and possessions (for overseas installations and forces).
    - k. Experimental, developmental, or research items and services.

- l. Classified items (e.g., ordinance equipment).
- m. Technical equipment requiring standardization and interchangeability of parts.
- n. Technical items and services, requiring substantial initial investment.
- o. National defense or industrial mobilization.
- p. Is otherwise authorized by law.

The first 5 (a-e) items in the above list are probably most directly applicable to Armed Forces food products and food services procurement in Hawaii.

In the study conducted by the U. S. Army Hawaii in the Summer of 1965 it was found that producers, processors, and some vendors objected to the then current technique used by the Armed Forces, particularly the Army, in buying fresh fruits and vegetables on a negotiated basis. At that time the Army purchased fruits, vegetables, and sometimes other items on a day-to-day basis. Daily purchasing provided the producer and processor with very little of the necessary lead time to adequately supply military requirements. The daily buying policy did not allow local producers to bid for available sales nor could the producer feel assured that his product would be purchased by the Armed Forces on any particular day. In Hawaii, where profitable sales alternatives are extremely limited, producers and processors were effectively made non-competitors for the available sales which in some or in the whole part were shipped in from the U. S. Mainland through local vendors or through the Armed Services Procurement System.

#### **Vendor Contracting with the Armed Forces**

Hawaii's producers, processors, and vendors may legally execute contracts with the Armed Forces. There are no legal obstacles to Armed Forces purchasing through fixed term, fixed term with escalating price clause contracts. These contracts can be written so they will be fair to the parties of the contract and will provide for sufficient lead time to plan, grow, process, and deliver products required.

Contracts should be strictly enforced by both parties. The supplier should be impressed with the fact that failure to deliver according to contract provisions will not be tolerated. Damages caused by non-performance or failure to comply with provisions of contract should be borne by the supplier (e.g., differences in price between what was stipulated in the contract and not delivered and the cost to the government in purchasing equivalent quality and quantity of product or services). Strict enforcement will actually benefit both the United States and the supplier or vendor. Suppliers need to realize that the Armed Services are interested in purchasing locally produced goods and services, and communications telling the Armed Services what is available, competitively, is often all that is needed to bring about a mutually beneficial relationship between the local supplier and the Armed Services requiring product or service. (See Appendix IV for applicable statutes in Hawaii.)

## PART V

### Conclusions and Recommendations

The overall intent of this study was to determine the practical potential for increased buying of food products and services from local production sources by the Armed Forces of the United States. The study was specifically directed at Army and Air Force procurement; however, it is believed to have applicability to all of the Armed Forces in Hawaii.

#### Facilitating Local Procurement

The problem in expanding the procurement of food products from locally grown supply sources is to a large part a problem of market structure. Primarily the problem of structure affects the fruit and vegetable sectors of the food trades. It is in the fruit and vegetable area where the best opportunities for expanded sales to the Armed Forces exist. Other commodities including prepared (manufactured) food products, livestock commodities, and food services have problems of market structure efficiencies; however, these appear currently to be less critical than for fruits and vegetables.

In essence, what is required is a system of facilitating devices which collectively deliver products to Armed Forces supply points at the least possible cost (price). This means that the system (market structure) must be sufficiently efficient to be price and service competitive with the same or similar products shipped in from mainland supply points. In view of what has been determined from the findings of this study, the existing marketing system must be streamlined, stripped of inefficiencies, and made to function more along modern merchandising techniques.

In order for the Armed Forces to spend more of their available funds for locally produced food products economically--that is, in such a way that all other alternatives are less desirable--the Armed Services must develop a system which can avoid some of the costs of the existing civilian market organization. In addition, the system chosen by the Armed Forces in dealing with local suppliers should encourage continued efficiency development at both production and marketing levels.

The most practical way to increase sales of locally produced food products and services to the Armed Forces is to initiate and maintain a system of contracting for supplies and services directly with producer groups. In this way, the Armed Services could circumvent some of the costs necessarily reflected in the price of the products they currently buy. Some of the Armed Forces requirements could in this way be directly integrated with the production facilities of Hawaiian crop and livestock industries.

The crop and livestock industries would bid directly for the sales to the Armed Forces. The competitive bid upon any commodity would be the price of the commodity if it had to be shipped from the continental United States, or else had to be purchased from independent local vendors who themselves would import from the Mainland. In either case the maximum price would always be the inshipment price, which, of course, represents the competitive force in the Hawaiian market.

In order to deal with producers, the Armed Forces should insist upon dealing with producers through an organization which can fairly represent producers in the market and which has authority and capacity to negotiate and commit producers to contract for producing specific commodities and/or services.

There appear to be several alternatives by which producers could organize to effectively supply military or other retail buyers:

1. They could organize cooperatively - either as a marketing organization or as a bargaining agency.
2. They could form a corporation representing enough producers to supply Armed Forces requirements.
3. They could work through existing state agencies to coordinate the production and distribution system.
4. They could request the State to institute a centralized contract negotiations center.
5. They could contract through one or several existing wholesaling or other sales firms on an agency basis.
6. A combination of two or more of the above could be developed.

There is a real need for producer organization and some type of central information or contract negotiations center; that is, a place where the wide variety of food supply and services needs of the military services can be aggregated and where the supply potential of Hawaii's agriculture can be coordinated to fit Armed Forces requirements. Coordination of this type, it is visualized, would do much to encourage local producers to produce for the Armed Forces market. Centralized coordination would also contribute to uniformity in conditions of sales and uniformity in procedures for servicing the Armed Forces market. (See Appendix III for a suggested procedure in organizing a central supply information and contracting facility.)

Perhaps a necessary first step in developing coordination of the sort intended above is an examination of procurement policy, particularly that policy area concerned with competitive relationships in Armed Forces purchasing. Comments have been made in other parts of this publication that the real competitive force in the Hawaiian agricultural market is the U. S. Mainland. For many Hawaiian agricultural commodities the wholesale price is likely to be the landed price of the same or similar commodities produced with mainland resources. Under these circumstances it is probable that the current concept of "many bidders" is not able to produce the expected economies (price and service benefits) to the Armed Forces. Vendors currently supplying the Armed Forces from mainland supply resources will attempt to recover all costs incurred, plus the additional expected normal profit as payment for services performed. The disadvantage incurred by the Armed Services, as well as any other major buyer of agricultural food stuffs to be resold at retail, is that the cost of maintaining the system is passed on to the buyer in the form of higher product prices. Evidence currently being collected in the Department of Agricultural Economics, at the University of Hawaii, tends to show that large-volume buyers

(buyers for chain stores) have been shifting directly to mainland sources for many items required. The tentative conclusion so far derived from this study, is that savings are being realized by these buyers for their firms as a result of direct mainland purchasing. In addition, it is probable that mainland suppliers have been able to meet the quantity, quality, price, and service requirements of large-scale retailers more effectively than local vendors.

The policy decisions to be made are of two sorts--

(1) As they relate to Market Organization

What are acceptable market organization arrangements with which the Armed Forces may do business? In Hawaii there appear to be at least three possible alternative arrangements in addition to the current system:

- a. Purchase directly from producers through organizations developed by producers (i.e., cooperative corporations and ordinary corporations) or through individual contract producers.
- b. Purchase classes of commodities (fruits, vegetables, meats, etc.) exclusively through a producer agent. The Armed Forces could stipulate, as part of conditions of sale, that products will be from local production sources.
- c. Purchase products through a centralized contracting facility-- established either by local government or by an agency such as the Hawaii Farm Bureau Federation.

(2) As they relate to Competition

Is landed price of commodities a good and sufficient indicator of the competitive value for the same or similar Hawaii-produced goods? Competition is conceived to involve at least the following additional considerations:

- a. Quantity--Are the suppliers in Hawaii able to provide quantities required by the buyer in the conduct of his operation?
- b. Quality--Is the quality as good or better than that of the landed product? Shelf life considerations?
- c. Services--Are suppliers able and willing to warranty their products and services?

### **Recommendations for Encouraging Marketing of Local Food Products and Related Services**

In the practical economic sense, Hawaii's agricultural producers, processors, and vendors can be expected to respond to profit incentives. If the military market is such that the supplier can indeed realize a return for his investment and labor, the product will become available. The problem of marketing to the Armed Forces has been, in part, that producers of some products have not had sufficient assurance that the Armed Forces would be able or willing to buy their products. In addition, producers have not been willing to sacrifice



or jeopardize their existing civilian clients for the rather insecure military sales. Even though the Hawaii-produced share of market has been shrinking on an overall basis, Hawaii's producers have been able to maintain their incomes relatively well. The stress on income, however, is likely to be rather keenly felt by some producers if actual quantities of Hawaii-produced commodities diminish. This is likely to occur in the vegetable industry, in some fruit products, and in some livestock products, because price and service competition for major retailing outlets currently tend to favor inshipments.

The Armed Forces can contribute to increased local product marketing by adopting policy and procedural measures which are designed to coordinate production, marketing, and merchandising practices of suppliers. From evaluation of the findings made by the U. S. Army Hawaii, the following should be features which are likely to contribute to increased local product marketing with the Armed Forces.

1. The Armed Forces must know what the bulk of their food requirements will be in advance of production. They must be able to project their requirements at least 3 months in advance of the time the product will be used. For some products the lead time requirements will be longer and for a limited number of commodities less.  
Recommendation: That the Armed Forces develop a system of record keeping designed to provide procurement and contracting personnel with ready information on at least quantities purchased over time, quality, and prices paid. It is further recommended that records data be regularly published and made available on a "Need to Know" basis to crop and livestock reporting people and to the central negotiations committee chairman or executive secretary should such an agency be developed. Records data should be released freely to facilitate the information resources available to the military, civilian suppliers, and researchers.
2. The Armed Forces should back up their market requirement with a specific contract. The contract should be written with sufficient lead time to allow producers to adjust their production schedules, processing operations, and shipping pattern to specific Armed Forces requirements.  
Recommendation: That the Armed Forces should contract for their major item requirements directly with Hawaiian producers, processors, and product service suppliers. The contracts should be let 90 to 180 days in advance of requirements. Conditions of sale should be clearly stipulated in contracts.
3. The Armed Forces should expect to enforce the stipulation (conditions of sale) contained in contract.  
Recommendation: That legal guards be established to protect the inviolacy of contracts consummated with and between producers and the Armed Forces. And, further, that

legal action will be brought for non-conformance, in the form of penalties as stipulated by performance clauses contained in the contracts.

4. The Armed Forces should contract for their bulk requirements directly with producers, processors, or service suppliers through their duly authorized representative or agency created for purposes of negotiating between the Army and producers.  
Recommendation: That the Armed Forces should insist upon dealing with primary producers of product, processes, and services.
5. The Armed Forces should insist upon locally produced products whenever there is sufficient evidence that local suppliers have the capability of producing the required product, process, or service competitively.  
Recommendation: That contracts stipulate locally produced commodities, processes, and services.
6. The Armed Forces need to develop a more comprehensive understanding of the market organization, production potential, and the economic effect of increased military purchasing in the local economy.  
Recommendation: That the Armed Forces participate more fully in activities designed to advance understanding of production, marketing, and merchandising problems of agriculture in Hawaii. That they participate with groups such as "The Produce Information Exchange" or other like agency currently existing or likely to be created.
7. The real costs of products purchased by the Armed Forces should be clearly determined. In order for the Armed Forces to accurately determine relative competitiveness between Hawaii-delivered products and mainland inshipments, costs of transportation, processing, assembly, distribution, and spoilage need to be known.  
Recommendation: That the real costs of inshipped products be accurately determined. That appropriate allowances be made for military shipping space and services in comparing to the alternative civilian cost for these services.
8. The Armed Forces demand for products can have an important economic impact upon the local economy. Funds expended by the Armed Services in the local economy for locally produced commodities, processes, and services have a larger net effect on the economy than is indicated by the specific dollar amounts. For the first round (multiplier effect) of food dollars let on contracts for locally produced products, part of the expenditures will become resident income while part will "leak" from the State to become income of residents in other areas. The "leak" is primarily to purchase factors of production. On the other hand, if dollars are spent directly with mainland suppliers or with mainland suppliers through local vendors, most of the expenditure is resident income to mainland

suppliers (resident income). Income "leak" back to Hawaii is not exceptionally important even where local vendors are part of the sales structure.

The formula normally used to express the multiplier effect is as follows:

$$k = \frac{1}{1 - MPC}$$

where k = the multiplier

MPC = the portion of each dollar of additional income spent on consumption of goods and services remaining in the State of Hawaii.

A study by the First National Bank of Hawaii<sup>4/</sup> estimates the coefficients to be as follows:

$$k = \frac{1}{1 - MPC}$$

$$k = \frac{1}{1 - 0.42}$$

$$k = 1.724$$

In words it means that for every additional dollar of income there is a multiplier effect of 1.724. It is probable that the effect is even greater for dollars of income dispersed in the rural areas of the State.

**Recommendation:** That the Armed Forces initiate programs of education and public relations, designed to show the importance of local expenditure on Hawaii-produced products, processes, and services.

**Note:** The effect of the Armed Forces on the local community, its institutions, its public services, as well as the dollar and cent value, must be part of the education and public relations effort. The local resident needs to be more aware of the contributions made by the Armed Forces, but even more importantly, the economic and other environmental contributions to the community that the Armed Services can make in the present and the future need more stress.

9. Local agencies and supplier groups could contribute to product development by instituting programs to educate users (consumers and troop personnel) in the use of local products. The effect of

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<sup>4/</sup> First National Bank of Hawaii, The Impact of Exports on Income in Hawaii, Department of Economics Research, 1960.

educating military families and troops to new and improved ways in using various tropical fruits, vegetables, and other products could be long lasting. Most of these people will ultimately return to the U. S. Mainland and may take preferences and newly developed tastes with them. At the same time both troop issue and resale outlets could benefit from this sort of education while in Hawaii and the local market would be stimulated by increased sales potentials.

Recommendation: That local agencies and individuals inaugurate programs of product-use education. Substitutes for some mainland commodities by Hawaii-produced products become practical when an understanding is developed by the consumer on ways these may be effectively included in diets. A wealth of information is available from home economics and nutrition experimentations to show how products are effectively used.

10. The total Armed Forces requirements for food items are 18-19 percent of the available supply in Hawaii. When the Army purchases locally produced items it buys these from the same producer as do the other services. It seems both logical and economically beneficial that a high degree of coordination be exercised by the services in the local markets.

Recommendation: Central procurement for all services in Hawaii be explored further.

#### **Recommendations for Procedures in Dissemination of Information on Requirements to Local Business**

The information on military supply requirements should be centrally managed either through a centralized military subsistence supply coordination center or through the appropriate supply authority for each of the services if central procurement for all services is deemed unfeasible. The determination of the amount and kind of information to be released relative to supply requirements should be a command function. This concept in no way diminishes what has been said in other parts of this report. It simply means that the concept of integrity of security must be maintained and, therefore, the commander must be able to control the release of information. The information on actual purchases that have been made or that will be made is the sort of data important to suppliers. The policy of "Need to Know" might be the second criteria which might be imposed on information dissemination specific requirements of commodities.

#### **Information on Armed Forces Buying Intentions**

The information on what the Armed Forces will buy (where determinations have been made for requirements) should be broadly distributed through all available channels. Specific information should be supplied to potential suppliers, supplier organizations, and the central coordination center if such is developed.

The Armed Forces should make public the following sorts of statistical and contracting data:

1. Quantities purchased--By item, by quarter, over any preceding 12-month period.
2. Prices paid--By quantity, by quality, on a weekly or contract basis.
3. Product distribution--To troop issue, to resale, other.
4. Future intents to purchase--
  - a. Items
  - b. Quantities
  - c. Quality (grade)
  - d. Conditions of acceptance (processing, packaging, point of delivery, point of inspection, etc.).
5. Contracting data, time, and place.

This information should be available at all times to individuals and firms on a request basis. Certain types of firms (probable and potential bidders) should be on a regular mailing list, and information dispatched as it becomes available. The following should be included on a regular mailing list:

1. Central Information and Market Coordination Center (See Appendix III)
2. Farm Bureau Federation of Hawaii
3. Past Suppliers
4. State Department of Agriculture
5. Hawaii Crop and Livestock Reporting Service
6. Small Business Administration
7. State Department of Planning and Economic Development
8. State Department of Transportation
9. University of Hawaii, Cooperative Extension Service
10. Others

In the event a central market coordination or market negotiations center is developed (see Appendix III), the Armed Forces could release most of their requirement data through this central system. The Armed Forces would still, however, be faced with developing a general public relations image in the community insofar as this is related to economic impact of the Armed Services in the local community. In any case the Armed Forces should work more closely with the University of Hawaii, particularly with the Cooperative Extension Service, which has developed a close working relationship with all segments of

the food industry and whose responsibility it is to facilitate the production-marketing function in the industry through dissemination of information and programs of education. Also the Armed Forces should cooperate more directly with the State Department of Agriculture, whose responsibility it is to advance the State's agriculture with a variety of programs, but mostly to carry out the acts duly approved by the State Legislature. Included in the State Department of Agriculture functions are inspection, grades and standards, and enforcement of these activities for agriculture.

In the final analysis, it is recommended that the Armed Forces initiate through their own resources or through the offices of the University of Hawaii or other State agencies a program of continuing research. Information must first be developed before it can be disseminated. In many respects the Army, and perhaps all of the services, do not know enough of their actual or potential impact upon the local economy to effectively disseminate information or to initiate programs of education.

Authors' Note: Hawaiian agriculture must continually seek ways in which it can remain competitive in the market place for the things it has to sell and for the resources it must attract in order to stay viable. We have often heard knowledgeable people, both in and out of agriculture, comment that "we are too far from the Mainland to effectively compete for markets and that the Hawaii pocket market does not offer an attractive potential for increasing Hawaiian agricultural sales." It is our belief from the findings of this study and from research currently underway in Hawaii that intra-market development in Hawaii offers an important potential for growth and expansion of the Hawaiian agricultural economy.

**APPENDIX I**

STANDARD FORM 33 DECEMBER 1964 EDITION GENERAL SERVICES ADMIN. FPR (41 CFR) 1-16.101	<b>INVITATION, BID, AND AWARD (SUPPLY CONTRACT)</b>	CONTRACT NO. _____ ORDER NO. (If any) _____	PAGE NO. 1	NUMBER OF PAGES
ISSUED BY _____  FOR INFORMATION CONTACT (Name and number) _____		ADDRESS YOUR BID TO: _____		

<b>INVITATION FOR BIDS</b>			
DATE ISSUED: _____	INVITATION NO.: _____		
BIDS MUST BE SUBMITTED IN ORIGINAL AND _____ COPIES.	BIDS WILL BE OPENED <input type="checkbox"/>	TIME _____	DATE _____
Sealed bids for furnishing the supplies or services described in the Schedule will be received in the designated bid opening room until the date and time specified above and at that time publicly opened. All bids are subject to the following:			
1. The attached Bidding Instructions, Terms, and Conditions, Standard Form 33-A. 2. The General Provisions, Standard Form 32, _____ edition, which is incorporated herein by reference.		3. The Schedule included below and/or attached hereto. 4. Such other provisions, representations, certifications, and specifications as are attached hereto or incorporated by reference in the Schedule.	
DELIVERY F.O.B.: _____			

<b>SCHEDULE</b>					
ITEM NO.	SUPPLIES OR SERVICES	QUANTITY <i>(Number of units)</i>	UNIT	UNIT PRICE	AMOUNT

<b>BID (NOTE.—REVERSE MUST ALSO BE FULLY COMPLETED BY THE BIDDER)</b>		
In compliance with the above, the undersigned offers and agrees, if this Bid be accepted within _____ calendar days (60 calendar days unless a different period is inserted by the bidder) from the date of opening, to furnish any or all of the items upon which prices are quoted, at the price set opposite each item, delivered at the designated point(s) within the time specified in the Schedule. Discounts will be allowed for prompt payment as follows: _____%, 10 calendar days; _____%, 20 calendar days; _____%, 30 calendar days; _____% _____ calendar days.		
NAME AND ADDRESS OF BIDDER (Street, city, State and ZIP code. Type or print) _____  AREA CODE AND TELEPHONE NO. _____	SIGNATURE OF PERSON AUTHORIZED TO SIGN BID _____  SIGNER'S NAME AND TITLE (Type or print) _____	DATE OF BID _____

<b>AWARD (To be completed by the Government)</b>		DATE OF AWARD: _____
ACCEPTED AS TO ITEMS NUMBERED _____	AMOUNT \$ _____	UNITED STATES OF AMERICA
SUBMIT INVOICE FOR PAYMENT TO _____		BY _____ <i>(Signature of Contracting Officer)</i>
PAYMENT WILL BE MADE BY _____		CONTRACTING OFFICER'S NAME (Type or print) _____
		ACCOUNTING AND APPROPRIATION DATA _____

**REPRESENTATIONS AND CERTIFICATIONS**

The Bidder makes the following representations and certifications as part of his bid: (Check or complete all appropriate boxes or blocks.)

**1. SMALL BUSINESS REPRESENTATION** (See par. 12 on SF 33-A)

He  is,  is not, a small business concern. If bidder is a small business concern and is not the manufacturer of the supplies bid upon, he also represents that all supplies to be furnished hereunder  will,  will not, be manufactured or produced by a small business concern in the United States, its possessions, or Puerto Rico.

**2. REGULAR DEALER-MANUFACTURER REPRESENTATION**

He is a  regular dealer in,  manufacturer of, the supplies bid upon.

**3. CONTINGENT FEE REPRESENTATION**

(a) He  has,  has not, employed or retained any company or person (other than a full-time, bona fide employee working solely for the bidder) to solicit or secure this contract, and (b) he  has,  has not, paid or agreed to pay any company or person (other than a full-time, bona fide employee working solely for the bidder) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of this contract; and agrees to furnish information relating to (a) and (b) above as requested by the Contracting Officer. (For interpretation of the representation, including the term "bona fide employee," see Code of Federal Regulations, Title 41, Subpart 1-1.5.)

**4. TYPE OF BUSINESS ORGANIZATION REPRESENTATION**

He operates as an  individual,  partnership,  corporation, incorporated in the State of \_\_\_\_\_.

**5. BIDDER AFFILIATION AND IDENTIFYING DATA.** Each bidder shall complete (a), and (b) if applicable, and (c) below:

(a) He  is,  is not, owned or controlled by a parent company. (See par. 13 on SF 33-A.)

(b) If the bidder is owned or controlled by a parent company, he shall enter in the blocks below the name and main office address of the parent company:

NAME OF PARENT COMPANY	MAIN OFFICE ADDRESS

(c) Employer's Identification Number (See par. 14 on SF 33-A)

BIDDER'S E.I. NO.	PARENT COMPANY'S E.I. NO.

**6. EQUAL OPPORTUNITY**

He  has,  has not, participated in a previous contract or subcontract subject either to the Equal Opportunity Clause herein or the clause originally contained in section 301 of Executive Order No. 10925; that he  has,  has not, filed all required compliance reports; and that representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained prior to subcontract awards. (The above representation need not be submitted in connection with contracts or subcontracts which are exempt from the clause.)

**7. BUY AMERICAN CERTIFICATE**

The bidder hereby certifies that each end product, except the end products listed below, is a domestic source end product (As defined in the clause entitled "Buy American Act"); and that components of unknown origin have been considered to have been mined, produced, or manufactured outside the United States.

EXCLUDED END PRODUCTS	COUNTRY OF ORIGIN

**8. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION** (See par. 15 on SF 33-A)

(a) By submission of this bid, the bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, that in connection with this procurement:

(1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

(2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other bidder or to any competitor; and

(3) No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.

(b) Each person signing this bid certifies that:

(1) He is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to (a) (1) through (a) (3) above; or

(2) (i) He is not the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein but that he has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to (a) (1) through (a) (3) above, and as their agent does hereby so certify; and (ii) he has not participated, and will not participate, in any action contrary to (a) (1) through (a) (3) above.

**NOTE.**—Bids must set forth full, accurate, and complete information as required by this invitation for bids (including attachments). The penalty for making false statements in bids is prescribed in 18 U.S.C. 1001.



## BIDDING INSTRUCTIONS, TERMS, AND CONDITIONS (SUPPLY CONTRACT)

**1. PREPARATION OF BIDS.**—(a) Bidders are expected to examine the drawings, specifications, Schedule, and all instructions. Failure to do so will be at the bidder's risk.

(b) Each bidder shall furnish the information required by the bid form. The bidder shall sign the bid and print or type his name on the Schedule and each Continuation Sheet thereof on which he makes an entry. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of his authority unless such evidence has been previously furnished to the issuing office.

(c) Unit price for each unit bid on shall be shown and such price shall include packing unless otherwise specified. A total shall be entered in the Amount column of the Schedule for each item bid on. In case of discrepancy between a unit price and extended price, the unit price will be presumed to be correct, subject, however, to correction to the same extent and in the same manner as any other mistake.

(d) Bids which offer supplies or services other than those specified will not be considered unless authorized by the Invitation for Bids.

(e) When not otherwise specified, bidder must definitely state time of proposed delivery.

(f) Time, if stated as a number of days, will include Sundays and holidays.

**2. EXPLANATIONS TO BIDDERS.**—Any explanation desired by a bidder regarding the meaning or interpretation of the Invitation for Bids, drawings, specifications, etc., must be requested in writing and with sufficient time allowed for a reply to reach bidders before the submission of their bids. Any information given to a prospective bidder concerning an Invitation for Bids will be furnished to all prospective bidders, as an amendment to the Invitation, if such information is necessary to bidders in submitting bids on the Invitation or if the lack of such information would be prejudicial to uninformed bidders. Receipt of amendments by a bidder must be acknowledged on the bid or by letter or telegram received before the time set for opening of bids. Oral explanations or instructions given before the award of the contract will not be binding.

**3. SUBMISSION OF BIDS.**—(a) Bids and modifications thereof shall be enclosed in sealed envelopes, addressed to the office specified in the Invitation for Bids, with the name and address of the bidder, the date and hour of opening, and the invitation number on the face of the envelope. Telegraphic bids will not be considered unless authorized by the Invitation; however, bids may be modified by telegraphic notice, subject to paragraph 6, below.

(b) Samples of items, when required, must be submitted within the time specified, and unless otherwise specified by the Government, at no expense to the Government. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Invitation.

**4. FAILURE TO BID.**—In the event no bid is to be submitted, do not return the Invitation unless otherwise specified. However, a letter or post card should be sent to the issuing office advising whether future invitations for the type of supplies or services covered by this Invitation are desired. Failure of the recipient to bid, or to notify the

issuing office that future invitations are desired, may result in removal of the name of such recipient from the mailing list for the type of supplies covered by the Invitation.

**5. WITHDRAWAL OF BIDS.**—Bids may be withdrawn subject to paragraph 6, below.

**6. LATE BIDS AND MODIFICATIONS OR WITHDRAWALS.**—(a) Bids and modifications or withdrawals thereof received at the office designated in the Invitation for Bids after the exact time set for opening of bids will not be considered unless: (1) they are received before award is made; and either (2) they are sent by registered mail, or by certified mail for which an official dated post office stamp (postmark) on the original Receipt for Certified Mail has been obtained, or by telegraph if authorized, and it is determined by the Government that the late receipt was due solely to delay in the mails, or delay by the telegraph company, for which the bidder was not responsible; or (3) if submitted by mail (or by telegram if authorized), it is determined by the Government that the late receipt was due solely to mishandling by the Government after receipt at the Government installation: Provided, That timely receipt at such installation is established upon examination of an appropriate date or time stamp (if any) of such installation, or of other documentary evidence of receipt (if readily available) within the control of such installation or of the post office serving it. However, a modification which makes the terms of the otherwise successful bid more favorable to the Government will be considered at any time it is received and may thereafter be accepted.

(b) Bidders using certified mail are cautioned to obtain a Receipt for Certified Mail showing a legible, dated postmark and to retain such receipt against the chance that it will be required as evidence that a late bid was timely mailed.

(c) The time of mailing of late bids submitted by registered or certified mail shall be deemed to be the last minute of the date shown in the postmark on the registered mail receipt or registered mail wrapper or on the Receipt for Certified Mail unless the bidder furnishes evidence from the post office station of mailing which establishes an earlier time. In the case of certified mail, the only acceptable evidence is as follows:

(1) Where the Receipt for Certified Mail identifies the post office station of mailing, evidence furnished by the bidder which establishes that the business day of that station ended at an earlier time, in which case the time of mailing shall be deemed to be the last minute of the business day of that station; or

(2) An entry in ink on the Receipt for Certified Mail showing the time of mailing and the initials of the postal employee receiving the item and making the entry, with appropriate written verification of such entry from the post office station of mailing, in which case the time of mailing shall be the time shown in the entry. If the postmark on the original Receipt for Certified Mail does not show a date, the bid shall not be considered.

**7. DISCOUNTS.**—(a) Notwithstanding the fact that a blank is provided for a ten (10) day discount, prompt payment discounts offered for payment within less than twenty (20) calendar days will not be considered in evaluating bids for award, unless otherwise specified in the Invitation for Bids. However, offered discounts of less than 20 days will

be taken if payment is made within the discount period, even though not considered in the bid evaluation.

(b) In connection with any discount offered, time will be computed from date of delivery of the supplies to carrier when delivery and acceptance are at point of origin, or from date of delivery at destination or port of embarkation when delivery and acceptance are at either of those points, or from date correct invoice or voucher is received in the office specified by the Government if the latter date is later than the date of delivery. Payment is deemed to be made, for the purpose of earning the discount, on the date of mailing of the Government check.

**8. AWARD OF CONTRACT.**—(a) The contract will be awarded to that responsible bidder whose bid, conforming to the Invitation for Bids, will be most advantageous to the Government, price and other factors considered.

(b) The Government reserves the right to reject any or all bids and to waive informalities and minor irregularities in bids received.

(c) The Government may accept any item or group of items of any bid, unless the bidder qualifies his bid by specific limitations. **UNLESS OTHERWISE PROVIDED IN THE SCHEDULE, BIDS MAY BE SUBMITTED FOR ANY QUANTITIES LESS THAN THOSE SPECIFIED; AND THE GOVERNMENT RESERVES THE RIGHT TO MAKE AN AWARD ON ANY ITEM FOR A QUANTITY LESS THAN THE QUANTITY BID UPON AT THE UNIT PRICES OFFERED UNLESS THE BIDDER SPECIFIES OTHERWISE IN HIS BID.**

(d) A written award mailed (or otherwise furnished) to the successful bidder within the time for acceptance specified in the bid shall be deemed to result in a binding contract without further action by either party.

**9. GOVERNMENT-FURNISHED PROPERTY.**—No material, labor, or facilities will be furnished by the Government unless otherwise provided for in the Invitation.

**10. LABOR INFORMATION.**—If a contract resulting from this Invitation for Bids is subject to the Walsh-Healey Public Contracts Act, a minimum wage determination under the Act is applicable to all employees of the contractor who are engaged in the manufacture or furnishing of the supplies required under the contract. Information in this connection as well as general information regarding requirements of the Act concerning overtime payment, child labor, safety and health, etc., should be obtained from the Wage and Hour and Public Contracts Divisions, Department of Labor, Washington, D.C. 20210, or from any of the Divisions' offices throughout the various States. It is important that requests for information include the Invitation number, name and address of the issuing agency, and a description of the supplies.

**11. SELLER'S INVOICES.**—Invoices shall be prepared and submitted in quadruplicate (one copy shall be marked "original") unless otherwise specified. Invoices shall contain the following information: Contract and order number (if any), item numbers, description of supplies or services,

sizes, quantities, unit prices, and extended totals. Bill of lading number and weight of shipment will be shown for shipments made on Government bills of lading.

**12. SMALL BUSINESS CONCERN.**—A small business concern for the purpose of Government procurement is a concern, including its affiliates, which is independently owned and operated, is not dominant in the field of operation in which it is bidding on Government contracts and can further qualify under the criteria concerning number of employees, average annual receipts, or other criteria, as prescribed by the Small Business Administration. (See Code of Federal Regulations, Title 13, Part 121, as amended, which contains detailed industry definitions and related procedures.)

**13. PARENT COMPANY.**—A parent company for the purpose of this bid is a company which either owns or controls the activities and basic business policies of the bidder. To own another company means the parent company must own at least a majority (more than 50%) of the voting rights in that company. To control another company, such ownership is not required; if another company is able to formulate, determine, or veto basic business policy decisions of the bidder, such other company is considered the parent company of the bidder. This control may be exercised through the use of dominant minority voting rights, use of proxy voting, contractual arrangements, or otherwise.

**14. EMPLOYER'S IDENTIFICATION NUMBER.**—The Bidder shall insert in the applicable space on the bid form, if he has no parent company, his own Employer's Identification Number (E.I. No.) (Federal Social Security Number used on Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941) or, if he has a parent company, the Employer's Identification Number of his parent company.

**15. CERTIFICATION OF INDEPENDENT PRICE DETERMINATION.**—(a) This certification on the bid form is not applicable to a foreign bidder submitting a bid for a contract which requires performance or delivery outside the United States, its possessions, and Puerto Rico.

(b) A bid will not be considered for award where (a) (1), (a) (3), or (b) of the certification has been deleted or modified. Where (a) (2) of the certification has been deleted or modified, the bid will not be considered for award unless the bidder furnishes with the bid a signed statement which sets forth in detail the circumstances of the disclosure and the head of the agency, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

**16. ORDER OF PRECEDENCE.**—In the event of an inconsistency between provisions of this Invitation for Bids, the inconsistency shall be resolved by giving precedence in the following order: (a) the Schedule; (b) Bidding instructions, terms and conditions of the Invitation for Bids; (c) general provisions; (d) other provisions of the contract, where incorporated by reference or otherwise; and (e) the specifications.

## APPENDIX II

# GENERAL PROVISIONS

(Supply Contract)

### 1. DEFINITIONS

As used throughout this contract, the following terms shall have the meaning set forth below:

- (a) The term "head of the agency" or "Secretary" means the Secretary, the Under Secretary, any Assistant Secretary, or any other head or assistant head of the executive or military department or other Federal agency; and the term "his duly authorized representative" means any person or persons or board (other than the Contracting Officer) authorized to act for the head of the agency or the Secretary.
- (b) The term "Contracting Officer" means the person executing this contract on behalf of the Government, and any other officer or civilian employee who is a properly designated Contracting Officer; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority.
- (c) Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders under this contract.

### 2. CHANGES

The Contracting Officer may at any time, by a written order, and without notice to the sureties, make changes, within the general scope of this contract, in any one or more of the following: (i) Drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the Government in accordance therewith; (ii) method of shipment or packing; and (iii) place of delivery. If any such change causes an increase or decrease in the cost of, or the time required for, the performance of any part of the work under this contract, whether changed or not changed by any such order, an equitable adjustment shall be made in the contract price or delivery schedule, or both, and the contract shall be modified in writing accordingly. Any claim by the Contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the Contractor of the notification of change: *Provided, however,* That the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim asserted at any time prior to final payment under this contract. Where the cost of property made obsolete or excess as a result of a change is included in the Contractor's claim for adjustment, the Contracting Officer shall have the right to prescribe the manner of disposition of such property. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.

### 3. EXTRAS

Except as otherwise provided in this contract, no payment for extras shall be made unless such extras and the price therefor have been authorized in writing by the Contracting Officer.

### 4. VARIATION IN QUANTITY

No variation in the quantity of any item called for by this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.

### 5. INSPECTION

(a) All supplies (which term throughout this clause includes without limitation raw materials, components, intermediate assemblies, and end products) shall be subject to inspection and test by the Government, to the extent practicable at all times and places including the period of manufacture, and in any event prior to acceptance.

(b) In case any supplies or lots of supplies are defective in material or workmanship or otherwise not in conformity

with the requirements of this contract, the Government shall have the right either to reject them (with or without instructions as to their disposition) or to require their correction. Supplies or lots of supplies which have been rejected or required to be corrected shall be removed or, if permitted or required by the Contracting Officer, corrected in place by and at the expense of the Contractor promptly after notice, and shall not thereafter be tendered for acceptance unless the former rejection or requirement of correction is disclosed. If the Contractor fails promptly to remove such supplies or lots of supplies which are required to be removed, or promptly to replace or correct such supplies or lots of supplies, the Government either (i) may by contract or otherwise replace or correct such supplies and charge to the Contractor the cost occasioned the Government thereby, or (ii) may terminate this contract for default as provided in the clause of this contract entitled "Default." Unless the Contractor corrects or replaces such supplies within the delivery schedule, the Contracting Officer may require the delivery of such supplies at a reduction in price which is equitable under the circumstances. Failure to agree to such reduction of price shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(c) If any inspection or test is made by the Government on the premises of the Contractor or a subcontractor, the Contractor without additional charge shall provide all reasonable facilities and assistance for the safety and convenience of the Government inspectors in the performance of their duties. If Government inspection or test is made at a point other than the premises of the Contractor or a subcontractor, it shall be at the expense of the Government except as otherwise provided in this contract: *Provided,* That in case of rejection the Government shall not be liable for any reduction in value of samples used in connection with such inspection or test. All inspections and tests by the Government shall be performed in such a manner as not to unduly delay the work. The Government reserves the right to charge to the Contractor any additional cost of Government inspection and test when supplies are not ready at the time such inspection and test is requested by the Contractor or when reinspection or retest is necessitated by prior rejection. Acceptance or rejection of the supplies shall be made as promptly as practicable after delivery, except as otherwise provided in this contract; but failure to inspect and accept or reject supplies shall neither relieve the Contractor from responsibility for such supplies as are not in accordance with the contract requirements nor impose liability on the Government therefor.

(d) The inspection and test by the Government of any supplies or lots thereof does not relieve the Contractor from any responsibility regarding defects or other failures to meet the contract requirements which may be discovered prior to acceptance. Except as otherwise provided in this contract, acceptance shall be conclusive except as regards latent defects, fraud, or such gross mistakes as amount to fraud.

(e) The Contractor shall provide and maintain an inspection system acceptable to the Government covering the supplies hereunder. Records of all inspection work by the Contractor shall be kept complete and available to the Government during the performance of this contract and for such longer period as may be specified elsewhere in this contract.

### 6. RESPONSIBILITY FOR SUPPLIES

Except as otherwise provided in this contract, (i) the Contractor shall be responsible for the supplies covered by this contract until they are delivered at the designated delivery point, regardless of the point of inspection; (ii) after delivery to the Government at the designated point and prior to acceptance by the Government or rejection and giving notice thereof by the Government, the Government shall be responsible for the loss or destruction of or damage to the supplies only if such loss, destruction, or

damage results from the negligence of officers, agents, or employees of the Government acting within the scope of their employment; and (iii) the Contractor shall bear all risks as to rejected supplies after notice of rejection, except that the Government shall be responsible for the loss, or destruction of, or damage to the supplies only if such loss, destruction or damage results from the gross negligence of officers, agents, or employees of the Government acting within the scope of their employment.

#### 7. PAYMENTS

The Contractor shall be paid, upon the submission of proper invoices or vouchers, the prices stipulated herein for supplies delivered and accepted or services rendered and accepted, less deductions, if any, as herein provided. Unless otherwise specified, payment will be made on partial deliveries accepted by the Government when the amount due on such deliveries so warrants; or, when requested by the Contractor, payment for accepted partial deliveries shall be made whenever such payment would equal or exceed either \$1,000 or 50 percent of the total amount of this contract.

#### 8. ASSIGNMENT OF CLAIMS

(a) Pursuant to the provisions of the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), if this contract provides for payments aggregating \$1,000 or more, claims for moneys due or to become due the Contractor from the Government under this contract may be assigned to a bank, trust company, or other financing institution, including any Federal lending agency, and may thereafter be further assigned and reassigned to any such institution. Any such assignment or reassignment shall cover all amounts payable under this contract and not already paid, and shall not be made to more than one party, except that any such assignment or reassignment may be made to one party as agent or trustee for two or more parties participating in such financing. Unless otherwise provided in this contract, payments to an assignee of any moneys due or to become due under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or setoff. (The preceding sentence applies only if this contract is made in time of war or national emergency as defined in said Act and is with the Department of Defense, the General Services Administration, the Atomic Energy Commission, the National Aeronautics and Space Administration, the Federal Aviation Agency, or any other department or agency of the United States designated by the President pursuant to Clause 4 of the proviso of section 1 of the Assignment of Claims Act of 1940, as amended by the Act of May 15, 1951, 65 Stat. 41.)

(b) In no event shall copies of this contract or of any plans, specifications, or other similar documents relating to work under this contract, if marked "Top Secret," "Secret," or "Confidential," be furnished to any assignee of any claim arising under this contract or to any other person not entitled to receive the same. However, a copy of any part or all of this contract so marked may be furnished, or any information contained therein may be disclosed, to such assignee upon the prior written authorization of the Contracting Officer.

#### 9. ADDITIONAL BOND SECURITY

If any surety upon any bond furnished in connection with this contract becomes unacceptable to the Government or if any such surety fails to furnish reports as to his financial condition from time to time as requested by the Government, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of the Government and of persons supplying labor or materials in the prosecution of the work contemplated by this contract.

#### 10. EXAMINATION OF RECORDS

(The following clause is applicable if the amount of this contract exceeds \$2,500 and was entered into by means of negotiation, but is not applicable if this contract was entered into by means of formal advertising.)

(a) The Contractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under this contract, have access to and the right to examine any directly pertinent books, documents, papers, and records of the Contractor involving transactions related to this contract.

(b) The Contractor further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Comptroller General of the United States or any of his duly authorized representatives shall, until the expiration of three years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract" as used in this clause excludes (i) purchase orders not exceeding \$2,500 and (ii) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

#### 11. DEFAULT

(a) The Government may, subject to the provisions of paragraph (c) below, by written notice of default to the Contractor, terminate the whole or any part of this contract in any one of the following circumstances:

(i) if the Contractor fails to make delivery of the supplies or to perform the services within the time specified herein or any extension thereof; or

(ii) if the Contractor fails to perform any of the other provisions of this contract, or so fails to make progress as to endanger performance of this contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

(b) In the event the Government terminates this contract in whole or in part as provided in paragraph (a) of this clause, the Government may procure, upon such terms and in such manner as the Contracting Officer may deem appropriate, supplies or services similar to those so terminated, and the Contractor shall be liable to the Government for any excess costs for such similar supplies or services: *Provided*, That the Contractor shall continue the performance of this contract to the extent not terminated under the provisions of this clause.

(c) Except with respect to defaults of subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the contract arises out of causes beyond the control and without the fault or negligence of the Contractor. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of the Government in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but in every case the failure to perform must be beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a subcontractor, and if such default arises out of causes beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the supplies or services to be furnished by the subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

(d) If this contract is terminated as provided in paragraph (a) of this clause, the Government, in addition to any other rights provided in this clause, may require the Contractor to transfer title and deliver to the Government, in the manner and to the extent directed by the Contracting Officer, (i) any completed supplies, and (ii) such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information, and contract rights (hereinafter called "manufacturing materials") as the Contractor has specifically produced or specifically acquired for the performance of such part of this contract as has been terminated; and the Contractor shall, upon direction of the Contracting Officer, protect and preserve property in possession of the Contractor in which the Government has an interest. Payment for completed supplies delivered to and accepted by the Government shall be at the contract price. Payment for manufacturing materials delivered to and accepted by the Government and for the protection and preservation of property shall be in an amount agreed upon by the Contractor and Contracting Officer; failure to agree to such amount shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." The Government may withhold

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from amounts otherwise due the Contractor for such completed supplies or manufacturing materials such sum as the Contracting Officer determines to be necessary to protect the Government against loss because of outstanding liens or claims of former lien holders.

(e) If, after notice of termination of this contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the default was excusable under the provisions of this clause, the rights and obligations of the parties shall, if the contract contains a clause providing for termination for convenience of the Government, be the same as if the notice of termination had been issued pursuant to such clause. If, after notice of termination of this contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, and if this contract does not contain a clause providing for termination for convenience of the Government, the contract shall be equitably adjusted to compensate for such termination and the contract modified accordingly; failure to agree to any such adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes."

(f) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.

12. DISPUTES (Apr 63)

(a) Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive unless, within 30 days of the receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Commanding General, United States Army, Hawaii. The decision of the Commanding General, United States Army, Hawaii, or his duly authorized representative (other than the Contracting Officer under this contract) for the determination of such appeals shall be final and conclusive if the amount involved in the appeal is \$50,000 or less. If the amount involved exceeds \$50,000 such decision shall be final and conclusive unless, within 30 days after receipt by the Contractor thereof, the Contractor furnishes to the Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals, or of the Commanding General, United States Army, Hawaii, in the case of appeals involving amounts of \$50,000 or less, shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this clause, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision.

(b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above; provided, that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law. (ASPR 7-103.12(c) & APP 7-103.12(b).)

13. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

The provisions of this clause shall be applicable only if the amount of this contract exceeds \$10,000.

(a) The Contractor shall report to the Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the Contractor has knowledge.

(b) In the event of any claim or suit against the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed hereunder, the Contractor shall furnish to the Government, when requested by the Contracting Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the Government except where the Contractor has agreed to indemnify the Government.

14. BUY AMERICAN ACT

(a) In acquiring end products, the Buy American Act (41 U.S. Code 10 a-d) provides that the Government give preference to domestic source end products. For the purpose of this clause:

(i) "components" means those articles, materials, and supplies, which are directly incorporated in the end products;

(ii) "end products" means those articles, materials, and supplies, which are to be acquired under this contract for public use; and

(iii) a "domestic source end product" means (A) an unmanufactured end product which has been mined or produced in the United States and (B) an end product manufactured in the United States if the cost of the components thereof which are mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. For the purposes of this (a) (iii) (B), components of foreign origin of the same type or kind as the products referred to in (b) (ii) or (iii) of this clause shall be treated as components mined, produced, or manufactured in the United States.

(b) The Contractor agrees that there will be delivered under this contract only domestic source end products, except end products:

(i) which are for use outside the United States;

(ii) which the Government determines are not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities and of a satisfactory quality;

(iii) as to which the Secretary determines the domestic preference to be inconsistent with the public interest; or

(iv) as to which the Secretary determines the cost to the Government to be unreasonable.

(The foregoing requirements are administered in accordance with Executive Order No. 10582, dated December 17, 1954.)

15. CONVICT LABOR

In connection with the performance of work under this contract, the Contractor agrees not to employ any person undergoing sentence of imprisonment at hard labor.

16. CONTRACT WORK HOURS STANDARDS ACT—OVERTIME COMPENSATION

This contract, to the extent that it is of a character specified in the Contract Work Hours Standards Act (40 U.S.C. 327-330), is subject to the following provisions and to all other applicable provisions and exceptions of such Act and the regulations of the Secretary of Labor thereunder.

(a) Overtime requirements. No Contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such work to work in excess of eight hours in any calendar day or in excess of forty hours in such workweek on work subject to the provisions of the Contract Work Hours Standards Act unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all such hours worked in excess of eight hours in any calendar day or in excess of forty hours in such workweek, whichever is the greater number of overtime hours.

(b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions of paragraph (a), the Contractor and any subcontractor responsible therefor shall be liable to any affected employee for his unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of the provisions of paragraph (a) in the sum of \$10 for each calendar day on which such employee was required or permitted to be employed on such work in excess of eight hours or in excess of his standard workweek of forty hours without payment of the overtime wages required by paragraph (a).

(c) Withholding for unpaid wages and liquidated damages. The Contracting Officer may withhold from the Government Prime Contractor, from any moneys payable on account of work performed by the Contractor or subcontractor

tor, such sums as may administratively be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the provisions of paragraph (b).

(d) Subcontracts. The Contractor shall insert paragraphs (a) through (d) of this clause in all subcontracts, and shall require their inclusion in all subcontracts of any tier.

(e) Records. The Contractor shall maintain payroll records containing the information specified in 29 CFR 516.2(a). Such records shall be preserved for three years from the completion of the contract.

#### 17. WALSH-HEALEY PUBLIC CONTRACTS ACT

If this contract is for the manufacture or furnishing of materials, supplies, articles, or equipment in an amount which exceeds or may exceed \$10,000 and is otherwise subject to the Walsh-Healey Public Contracts Act, as amended (41 U.S. Code 35-45), there are hereby incorporated by reference all representations and stipulations required by said Act and regulations issued thereunder by the Secretary of Labor, such representations and stipulations being subject to all applicable rulings and interpretations of the Secretary of Labor which are now or may hereafter be in effect.

#### 18. EQUAL OPPORTUNITY

(The following clause is applicable unless this contract is exempt under the rules and regulations of the President's Committee on Equal Employment Opportunity (41 CFR, Chapter 60). Exemptions include contracts and subcontracts (i) not exceeding \$10,000, (ii) not exceeding \$100,000 for standard commercial supplies or raw materials, and (iii) under which work is performed outside the United States and no recruitment of workers within the United States is involved.)

During the performance of this contract, the Contractor agrees as follows:

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, creed, color, or national origin. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.

(b) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(c) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under this nondiscrimination clause, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(d) The Contractor will comply with all provisions of Executive Order No. 10925 of March 6, 1961, as amended, and of the rules, regulations, and relevant orders of the President's Committee on Equal Employment Opportunity created thereby.

(e) The Contractor will furnish all information and reports required by Executive Order No. 10925 of March 6, 1961, as amended, and by the rules, regulations, and orders of the said Committee, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Committee for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(f) In the event of the Contractor's noncompliance with the nondiscrimination clause of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized

in Executive Order No. 10925 of March 6, 1961, as amended, and such other sanctions may be imposed and remedies invoked as provided in the said Executive order or by rule, regulation, or order of the President's Committee on Equal Employment Opportunity, or as otherwise provided by law.

(g) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the President's Committee on Equal Employment Opportunity issued pursuant to section 303 of Executive Order No. 10925 of March 6, 1961, as amended, so that such provisions will be binding upon each subcontractor or vendor.\* The Contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

*\*Unless otherwise provided, the Equal Opportunity Clause is not required to be inserted in subcontracts below the second tier except for subcontracts involving the performance of 'construction work' at the 'site of construction' (as those terms are defined in the Committee's rules and regulations) in which case the clause must be inserted in all such subcontracts. Subcontracts may incorporate by reference the Equal Opportunity Clause.*

#### 19. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident Commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

#### 20. COVENANT AGAINST CONTINGENT FEES

The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage, or contingent fee.

#### 21. UTILIZATION OF SMALL BUSINESS CONCERNS

(a) It is the policy of the Government as declared by the Congress that a fair proportion of the purchases and contracts for supplies and services for the Government be placed with small business concerns.

(b) The Contractor agrees to accomplish the maximum amount of subcontracting to small business concerns that the Contractor finds to be consistent with the efficient performance of this contract.

#### 22. UTILIZATION OF CONCERNS IN LABOR SURPLUS AREAS

(The following clause is applicable if this contract exceeds \$5,000.)

It is the policy of the Government to place contracts with concerns which will perform such contracts substantially in areas of persistent or substantial labor surplus where this can be done, consistent with the efficient performance of the contract, at prices no higher than are obtainable elsewhere. The Contractor agrees to use his best efforts to place his subcontracts in accordance with this policy. In complying with the foregoing and with paragraph (b) of the clause of this contract entitled "Utilization of Small Business Concerns," the Contractor in placing his subcontracts shall observe the following order of preference: (I) persistent labor surplus area concerns which are also small business concerns; (II) other persistent labor surplus area concerns; (III) substantial labor surplus area concerns which are also small business concerns; (IV) other substantial labor surplus area concerns; and (V) small business concerns which are not labor surplus area concerns.

ADDITIONAL PROVISIONS:<sup>5</sup>

23. FEDERAL, STATE, AND LOCAL TAXES (AUG 1961): (a) Except as may be otherwise provided in this contract, the contract price includes all applicable Federal, State, and local taxes and duties.

(b) Nevertheless, the respect to any Federal excise tax or duty on the transactions or property covered by this contract, if a statute, court decision, written ruling, or regulation takes effect after the contract date, and - -

- (1) results in the Contractor being required to pay or bear the burden of any such Federal excise tax or duty or increase in the rate thereof which would not otherwise have been payable on such transactions or property, the contract price shall be increased by the amount of such tax or duty or rate increase, provided the Contractor warrants in writing that no amount for such newly imposed Federal excise tax or duty or rate increase was included in the contract price as a contingency reserve or otherwise; or
- (2) results in the Contractor not being required to pay or bear the burden of, or in his obtaining a refund or drawback of, any such Federal excise tax or duty which would otherwise have been payable on such transactions or property or which was the basis of an increase in the contract price, the contract price shall be decreased by the amount of the relief, refund, or drawback, or that amount shall be paid to the Government, as directed by the Contracting Officer. The contract price shall be similarly decreased if the Contractor through his fault or negligence or his failure to follow instructions of the Contracting Officer, is required to pay or bear the burden of, or does not obtain a refund or drawback of, any such Federal excise tax or duty.

(c) No adjustment of less than \$100 shall be made in the contract price pursuant to paragraph (b) above.

(d) As used in paragraph (b) above, the term "contract date" means the date set for bid opening, or if this is a negotiated contract, the contract date. As to additional supplies or services procured by modification to this contract, the term "contract date" means the date of such modification.

(e) Unless there does not exist any reasonable basis to sustain an exemption, the Government upon the request of the Contractor shall, without further liability, furnish evidence appropriate to establish exemption from any Federal, State, or local tax; provided that, evidence appropriate to establish exemption from any Federal excise tax or duty which may give rise to either an increase or decrease in the contract price will be furnished only at the discretion of the Government.

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<sup>5/</sup> Items 23-31 are contract provisions which have been added to Standard Form 32 (General Provisions, Supply Contract) as Addenda or "Additional Provisions." Item 12 was a revised provision and is included in Appendix II as revised.

(f) The Contractor shall promptly notify the Contracting Officer of matters which will result in either an increase or decrease in the contract price, and shall take action with respect thereto as directed by the Contracting Officer. (ASPR 11-401.1)

24. RENEGOTIATION (OCT 1959): (a) To the extent required by law, this contract is subject to the Renegotiation Act of 1951 (50 U.S.C. App. 1211, et seq.), as amended, and to any subsequent act of the United States Congress providing for the renegotiation of contracts. Nothing contained in this clause shall impose any renegotiation obligation with respect to this contract or any subcontract hereunder which is not imposed by an act of the United States Congress heretofore or hereafter enacted. Subject to the foregoing this contract shall be deemed to contain all the provisions required by Section 104 of the Renegotiation Act of 1951, and by any such other act, without subsequent contract amendment specifically incorporating such provisions.

(b) The Contractor agrees to insert the provisions of this clause, including this paragraph (b), in all subcontracts, as that term is defined in Section 103g of the Renegotiation Act of 1951, as amended. (ASPR 7-103.13)

25. TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (JAN 1960): The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the best interest of the Government. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with ASPR Section VIII, in effect on this contract's date. To the extent that this contract is for services and is so terminated, the Government shall be liable only for payment in accordance with the payment provisions of this contract for services rendered prior to the effective date of termination. (ASPR 8-705.1)

26. AUTHORIZATION AND CONSENT (MAR 1964): The Government hereby gives its authorization and consent (without prejudice to any rights of indemnification) for all use and manufacture, in the performance of this contract or any part hereof or any amendment hereto or any subcontract hereunder (including any lower-tier subcontract), of any invention described in and covered by a patent of the United States (i) embodies in the structure or composition of any article the delivery of which is accepted by the Government under this contract, or (ii) utilized in the machinery, tools, or methods the use of which necessarily results from compliance by the Contractor or the using subcontractor with (a) specifications or written provisions now or hereafter forming a part of this contract, or (b) specific written instructions given by the Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clauses, if any, included in this contract or any subcontract hereunder (including any lower-tier subcontract), and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted. (ASPR 7-103.22 & 9-102.1)



27. NOTICE TO THE GOVERNMENT OF LABOR DISPUTES (SEP 1958): (a) Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the Contractor shall immediately give notice thereof, including all relevant information with respect thereto, to the Contracting Officer.

(b) The Contractor agrees to insert the substance of this clause, including this paragraph (b), in any subcontract hereunder as to which a labor dispute may delay the timely performance of this contract; except that each such subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the subcontractor shall immediately notify its next tier subcontractor, or the prime Contractor, as the case may be, of all relevant information with respect to such dispute. (ASPR 7-104.4)

28. PATENT INDEMNITY (SEP 1964): If the amount of this contract is in excess of \$5,000, the Contractor shall indemnify the Government and its officers, agents, and employees against liability, including costs, for infringement of any United States letters patent (except letters patent issued upon an application which is now or may hereafter be kept secret or otherwise withheld from issue by order of the Government) arising out of the manufacture or delivery of supplies or out of construction alteration, modification, or repair or real property (hereinafter referred to as "construction work") under this contract, or out of the use or disposal by or for the account of the Government of such supplies or construction work. The foregoing indemnity shall not apply unless the Contractor shall have been informed as soon as practicable by the Government of the suit or action alleging such infringement, and shall have been given such opportunity as is afforded by applicable laws, rules, or regulations to participate in the defense thereof; and further such indemnity shall not apply to: (i) an infringement resulting from compliance with specific written instructions of the Contracting Officer directing a change in the supplies to be delivered or in the materials or equipment to be used, or directing a manner of performance of the contract not normally used by the Contractor; (ii) an infringement resulting from addition to, or change in, such supplies or components furnished or construction work performed which addition or change was made subsequent to delivery or performance by the Contractor; or (iii) a claimed infringement which is settled without the consent of the Contractor, unless required by final decree of a court of competent jurisdiction. (ASPR 9-103.1 & 7-104.5)

29. PREFERENCE FOR CERTAIN DOMESTIC COMMODITIES (SEP 1962): The Contractor agrees that there will be delivered under this contract only such articles of food, clothing, cotton, woven silk and woven silk blends, spun silk yarn for cartridge cloth, or wool (whether in the form of fiber or yarn or contained in fabrics, materials, or manufactured articles) as have been grown, reprocessed, reused or produced in the United States, its possessions, or Puerto Rico; provided, that this clause shall have no effect to the extent that the Secretary has determined as any such articles that a satisfactory quality and sufficient quantity cannot be procured as and when needed at United States Market prices; provided further, that nothing herein shall preclude the delivery of foods under this contract which have been manufactured or processed in the United States, its possessions, or Puerto Rico. (ASPR 7-104.13)

30. GRATUITIES (MAR 1952): (a) The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found, after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determination with respect to the performing of such contract; provided, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this contract is terminated as provided in paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee.

(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract. (ASPR 7-104.16)

31. PRIORITIES, ALLOCATIONS, AND ALLOTMENTS (JAN 1961): The Contractor shall follow the provisions of DMS Reg. 1 and all other applicable regulations and orders of the Business and Defense Services Administration in obtaining controlled materials and other products and materials needed to fill this order. (ASPR 7-104.18)

### APPENDIX III

#### Suggested Procedures and Organization of Central Supply Information and Contracting Facility

A central theme throughout this publication has been a plea for coordination. Primarily, the ideas expressed have had to do with coordinating Armed Forces Food Supply requirements with the food production and distribution capabilities of the various segments of Hawaii food industries.

Coordination, as visualized here, could be accomplished from three broad points of view. First, coordination could be accomplished from the Armed Forces or demand side; or second, coordination could be accomplished from the producer or supply side. The third means for attaining coordination is a combination of the first two. Coordination of the third sort is particularly applicable to the Hawaii market because of the limited market alternatives for many Hawaii-produced agricultural commodities. The Armed Forces market could in fact be additive to current sales outlets and volume of sales to many Hawaii-produced commodities. However, in order to realize increased sales, the producer must know what and how much the Armed Forces will buy. If producers or vendors know what Armed Forces requirements will be, they could coordinate production among themselves through their cooperative or other organizational arrangements.

The aggregated Armed Forces supply requirements and Hawaii producer capabilities could be dovetailed by a system of suitable contracts between the Armed Forces and producers.

A realistic approach to coordination between suppliers and the Armed Forces would be through the establishment of a central coordination facility or agency. A central coordination agency could probably provide the service of matching supply with specific requirements most economically. Whereas currently, each of the military services must go into the market independently and whereas producers are faced with bargaining with the different services individually or at best are minimally organized, a central coordinating agency could aggregate requirements and facilitate contracting between producers and the various services.

The following outline is presented as a suggested procedure for establishing a central coordination facility specifically designed for Hawaii conditions.

#### A. Top-Level Meeting:

1. Participants: Hawaii State Governor and interested military commanders.
2. Purposes:
  - a. To emphasize the importance of increased purchasing by the military on the State's economy, particularly to agriculture and the rural communities.

- b. To emphasize the need for closer cooperation and coordination in meeting military food supply requirements from local production.
- c. To assign responsibilities for developing policy for appropriate military and/or civilian agencies. (See participants in "B" below.)

B. Agency Meeting or Meetings:

1. Participants:

- a. State of Hawaii
  - (1) Department of Agriculture
  - (2) Department of Land and Natural Resources
  - (3) Department of Planning and Economic Development
  - (4) Land Use Commission
  - (5) Department of Transportation
  - (6) Department of Labor and Industrial Relations
  - (7) Office of the Adjutant General
- b. University of Hawaii
  - (1) Dean, College of Tropical Agriculture
- c. Military Services
  - (1) Judge Advocate - USARHAW
  - (2) Local Officer - U. S. Navy
  - (3) G-4 USARHAW
  - (4) Procurement and Contracting Officer - USARHAW
- d. United States Government
  - (1) Head - Soil Conservation Service
  - (2) Head - Small Business Administration
  - (3) Head - Farmers Home Administration
  - (4) Head - Agriculture Stabilization and Conservation Service
- e. Private Industry
  - (1) Executive Secretary - Honolulu Chamber of Commerce
  - (2) President - Bank of Hawaii
  - (3) President - First National Bank
  - (4) Agricultural Firms
    - (a) American Factors, Incorporated
    - (b) C. Brewer & Company, Limited
    - (c) Castle & Cooke, Incorporated

- (d) Alexander & Baldwin, Inc.
- (e) Theo H. Davis & Co., Ltd.
- (f) Dole Company
- (g) Libby McNeil & Libby
- (h) California Packing Corporation
- (i) Hawaiian Fruit Packers

(5) Research Firms - Private Agriculture

- (a) Director - Hawaiian Sugar Planters' Association
- (b) Director - Pineapple Research Institute of Hawaii

2. Purposes:
- a. To explore alternative procedures for expanding sales to military from local production.
  - b. To develop policy guidance for various military and government agencies and departments.
  - c. To appoint and organize the coordinating or working committee.

C. Operating or Working Committee (Central Coordination):

1. Participants:
- a. Specific agency personnel currently conducting market development in:
    - (1) Livestock products
    - (2) Fresh fruits and vegetables
    - (3) Manufactured and processed foods.
  - b. Specific agency personnel currently assigned inspection and other enforcement activities in:
    - (1) Livestock products
    - (2) Fresh fruits and vegetables
    - (3) Manufactured and processed foods.
  - c. Specific agency personnel capable of conducting production, marketing, and merchandising research in:
    - (1) Livestock products
    - (2) Fresh fruits and vegetables
    - (3) Manufactured and processed foods.
  - d. Specific agency personnel concerned with market reporting, statistics, and user education.

e. Military procurement and contracting personnel

f. Commodity groups - representatives from:

- (1) Vegetable producers
- (2) Fruit growers
- (3) Poultry producers (meat and eggs)
- (4) Dairy association
- (5) Dairy processors
- (6) Manufacturers' association
- (7) Cattlemen's association
- (8) Wholesalers' association
- (9) Produce Information Exchange
- (10) Others - as indicated

2. Purposes:

- a. Planning, coordinating, and initiating production and marketing activities between Hawaiian agricultural producers and the military buyers. Representation should be extended to all producer areas within the State. Committees could be organized on all major islands.
- b. Seek organizational and operational efficiencies at both the production and marketing levels.
- c. Standardize contracting procedures.
- d. Standardize product grades, packaging, and delivery procedure.
- e. Develop equitable product grading procedures.
- f. Develop product quantity, quality and price projections.
- g. Assist producer groups in bidding for contracts.

The last group (the operating committee) should work out general statements and aims and purposes in planning for increased efficiencies in production, marketing, and merchandising of Hawaiian-produced food items to the military.

A series of meetings on all islands should be held to work with specific producer groups and to obtain ideas and suggestions for increasing sales. The necessary coordination responsibilities should be assigned and the procedures and requirements to bid for sales to the military should be explained fully.

A system of liaison should be developed which will keep all concerned individuals and organizations informed. Consideration should be given to the development of a permanent coordination facility. An executive secretary should be selected and appointed--perhaps to serve at a department level within

the State government, or else as an added function within the State Department of Agriculture or other appropriate agency.

Records, statistical data, and other information should be available to all on a "need to know" basis.

APPENDIX IV

Pertinent Statutes

Revised Laws of Hawaii

Hawaiian statutes giving authority for cooperatives and corporations to enter into contract with the armed services are extracted in the following:

Chapter 172, R.L.H., 1955 - Corporations Generally

Sections 172-23. Powers, express. Every corporation created in the Territory shall have power:

- (d) To hold, purchase and convey such property as the purposes of the corporation require, not exceeding the amount limited by its articles of association or charter if any limit is therein prescribed, and to mortgage, pledge and hypothecate the same to secure any debt of the corporation.

Chapter 176, R.L.H., 1955 - Uniform Agricultural Cooperative Association Act (Modified):

Section 176-10. Powers

- (a) An association formed under this chapter, or an association which might be formed under this chapter and which existed at the time this chapter took effect, shall have the capacity to act possessed by natural persons, but such association shall have the authority to perform only such acts as are necessary or proper to accomplish the purposes as set forth in its articles and which are not repugnant to law.
- (b) Without limiting or enlarging the grant of authority contained in subdivision (a) of this section, every such association shall have authority:

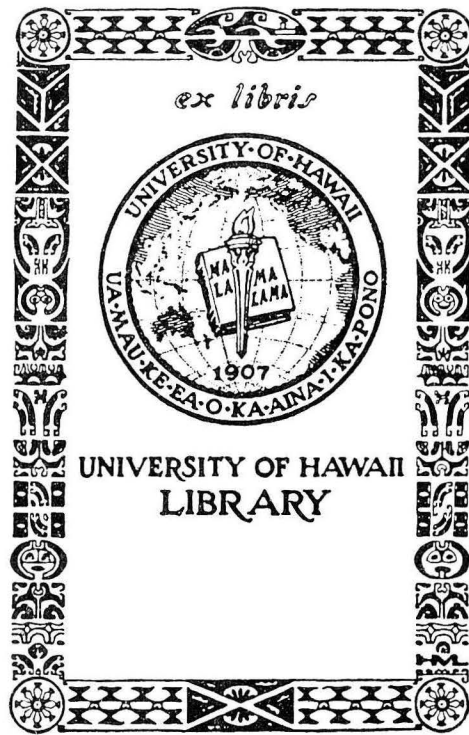
\* \* \* \* \*

- (2) To make contracts, and to exercise by its board or duly authorized officers or agents, all such incidental powers as may be necessary, suitable or proper for the accomplishment of the purposes of the association and not inconsistent with law or its articles, and that may be conducive to or expedient for the interest or benefit of the association.

\* \* \* \* \*

General provisions for contracting with the Armed Forces in Hawaii are contained in Appendix II of this publication.





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