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Title Educational, Economic and Sociological Problems
Encountered in Training the Light Aviation Sections of the Oregon National Guard

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This thesis deals with the difficulties encountered by the Regular Army officer assigned as Light Aviation Advisor to assist in training the light aviation sections of the Oregon National Guard. The over-all objectives of the National Guard are the organization and training of civilian military units capable of defending this country in case of national emergency. The National Guard differs from Regular Army units in that it is a State-controlled peacetime organization. Its members are civilians whose activities in the Guard are of an avocational nature. Consequently, the problems encountered here differed from those found on Regular Army posts.

Educational, Economic and Sociological problems were met in the training of these light aviation sections. The problems were found to include limitations of time and facilities, lack of immediate objectives, limited authority of Regular Army Instructors, limitations of State funds for support of the Guard, the presence of social stratification in the Guard, problems of selection of personnel, weaknesses in discipline and the effect of the Guard activities on the family life of the members.

As a means of overcoming these problems it is recommended that the Oregon National Guard obtain better training facilities for its light aviation sections, stress the avocational interests attached to membership in the Guard, such as flying, fraternity, travel opportunities and additional Army schooling which would create and help hold interest in the Guard activities. The lack of incentive and primary motivation can be met by setting-up intermediate goals or objectives which must be reached by the units by a given time. An improved system by which the National Guardsmen select new members should be developed in order to place a greater emphasis upon selecting capable, well-qualified men for the light aviation sections. Plans should be formulated to bring the families of the light aviation section members into the program of the Guard through participation in organized social activities.
EDUCATIONAL, ECONOMIC AND SOCIOLOGICAL PROBLEMS ENCOUNTERED IN TRAINING THE LIGHT AVIATION SECTIONS OF THE OREGON NATIONAL GUARD

by

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This study deals with the problems encountered by an Army officer assigned to duty as Light Aviation Advisor with the Oregon National Guard. His mission is to effect a high state of training in the light aviation sections assigned to the ground units of the Guard.\(^1\)

The Oregon National Guard is not a Federal organization. It is the military force of the State of Oregon. The Governor is its Commander-in-Chief.\(^2\) The Governor exercises control through his military representative, the State Adjutant General. The Guard can be called to duty by the Governor to suppress domestic disturbances and to assist in State emergencies.

The Army officer assigned to this duty serves with an organization that is more civilian in nature than military. It is more like a local fraternal organization than a strictly military organization. Its personnel are earning a

\(^1\)Letter, National Guard Bureau, dated 28 October 1947 par. 3. 
\(^2\)State of Oregon Military and Veterans Code. p.3.
living as civilians with civilian ways of thinking and acting. They spend only two hours a week at Armory Drill.\(^3\)

The Guard has a dual function in that, by an Act of Congress, it can be called into Federal service during a National Emergency.\(^4\) In order to prepare for this dual mission, the Guard borrows weapons and equipment from the Federal government. The Federal government also furnishes funds to pay personnel for attending Armory Drill\(^5\) and a Regular Army instructor group is assigned to each state to assist the governor in organizing and training the Guard along military lines.\(^6\)

The Department of the Army has no direct command function over the National Guard, nor can Regular Army officers assigned as instructors issue direct orders to a National Guardsman. Only by tactful encouragement and patient perseverance do they attain their objective which is helping the Guard to reach a high state of training and proficiency.

The Light Aviation Advisor joins the Regular Army instructor group as a technical specialist.\(^7\) This is a recent development. The use of light aircraft in field

\(^3\)National Guard Regulation Number 45, Par. 4.
\(^4\)National Defense Act, Section 103.
\(^5\)National Guard Regulation Number 58, Par. 1.
\(^6\)National Guard Regulation Number 40, Par. 2.
\(^7\)Letter, National Guard Bureau, dated 28 October 1947, Par. 1.
artillery dates back only to the last war and planes have been used in the infantry for only two years. The Light Aviation Advisor must acquaint artillery and infantry units with the use of their airplanes. It is a selling program. The idea of having an airplane as part of a regiment's equipment is often viewed with alarm by older infantry officers. The Light Aviation Advisor is a salesman, counselor, trouble-shooter and technical expert. His duty is to help select pilots and mechanics, advise on maintenance and repair problems and instruct in the use of the plane in the training program of the unit.

The Light Aviation Advisor is a junior officer, a lieutenant or captain. Often he must put his ideas across to officers senior to him and with many more years of service. Credit for any degree of success that he achieves goes to the unit; failures are often laid at his door. He has no command function. He cannot select pilots or mechanics, yet he must help them to accomplish their assigned objectives. The objective of the National Guard "is to insure that all units will be capable of immediate mobilization and field service with a minimum of time required for field training prior to commitment to actual combat operations".

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8National Guard Regulation Number 40, Par. 1.
9National Guard Regulation Number 45, Par. 4b.
The purpose of this study is to make a detailed examination of the problems of training the light aviation sections of the Oregon National Guard and from the analysis and conclusions drawn develop a method designed to "sell the program" in such a way that the highest standards of continuous training will be reached and maintained.

A Brief Statement of the Problem

The Light Aviation Advisor is faced with an environment quite different from those produced by the customary training routines and rules of conduct associated with Regular Army posts. New problems are presented for which he must find a solution. They are so inter-related that to ignore any one of them would eventually bring his entire efforts to a standstill. These problems may be grouped roughly into three classes; educational, economic and sociological. Standard educational techniques are employed in any standard military training program.\(^\text{10}\) However, in dealing with Civilian Components of the Armed Forces other problems, such as those of an economic and sociological nature have such a direct bearing that they must be considered along with the educational problems if an effective, integrated program is to be obtained.

\(^{10}\)Technical Manual Number 21-250, Par. 1.
The above problems are easily solved when one is on duty with Regular Troops. A normal drill schedule of from eight to twenty-four hours a day is available for training purposes. Military considerations come first and the time of day, or day of the week is not allowed to interfere while training is going on. Personnel are paid a fixed salary. Each member of the military establishment is paid an amount sufficient to maintain himself at the standard prescribed for his rank and grade. Social levels have been established whereby personnel may find social outlets among persons of equal rank and earning power. With the standards of pay and social conduct rigidly established, one needs only to adjust himself to the established routine in order to be free to devote his entire attention to reaching a high state of training in his unit which is the primary consideration.

On the other hand, a National Guard officer must solve his problems in a different way. The following problems which were encountered in training the light aviation sections of the Oregon National Guard have been selected for detailed study.

Educational Problems

1. Time Limitations.11

11National Guard Regulation No. 45 pars. 10 and 27.
2. Limited Facilities.\textsuperscript{12}
3. Distant and Obscure Objectives.\textsuperscript{13}
4. Limited Authority of Regular Army Instructors.
5. Lack of Primary Motivation.

Economic Problems
1. National Guard Interest Secondary to Vocational.
2. Limitations of State Funds for the National Guard.\textsuperscript{14}
3. Requirements for Drill Pay.

Sociological Problems
1. Social Classes in the Guard.
2. Selection of Personnel.
3. Weaknesses in Discipline and Authority.
4. Effects of Influence.
5. Effects on Family Life.

The Purpose of the Study

The purpose of this study is to develop a plan of instruction that the Light Aviation Advisor may use in training the light aviation sections of the Oregon National Guard. In order to fulfill this teaching mission he must

\textsuperscript{12}Department of the Army Field Manual No. 20-100 par. 18.
\textsuperscript{13}Ibid., par. 11.
\textsuperscript{14}Light Aviation Section Training Guide. par. 7b.
first obtain a better understanding of his problems. As previously stated, they are of three kinds. The first is the educational. This is, of course, his primary mission. Inter-related with the educational problem are two others, i.e., economic and sociological. These have such an important bearing on the program that all three must be clearly understood if a successful teaching medium is to be established.

A detailed analysis of each of the above problems and a determination of their true relationship to each other has been made. The information has been assembled and analyzed. From the conclusions drawn, a new training program has been formulated. It is hoped that the use of such a program will make possible a greater degree of success in the training of the light aviation sections of the Oregon National Guard.

In order to provide a background and understanding of the problem, a chapter on the history of the Oregon National Guard has been included.

Location of the Study

This study was made in the city of Portland, Oregon, because all of the light aviation sections dealt with are presently located in this area. The infantry and artillery units of which these air sections are a part are based at
the Portland Airbase in the barracks area used by the Army Air Forces during World War II. The light aviation aircraft use the facilities of the Portland Airport.

Subjects Employed in the Study

The subjects concerned in this study will be listed by organizations rather than as individuals. The list will include the Headquarters 41st. Infantry Division, Headquarters 41st. Division Artillery, the 218th Field Artillery Battalion and 965th Field Artillery Battalion and the 162nd and 186th Infantry Regiments all of the Oregon National Guard. In addition, reference will be made occasionally to the State Adjutant General and the State Military Headquarters Detachment both of which are at the State capital in Salem, Oregon.

Characteristics of the Community

The "community" in this case includes the entire city of Portland with a population of over 400,000. The city is the largest in the State and in 1948 showed the greatest population increase in the nation. This influx of people came mainly from Middle-western, Southern, and Southwestern sections of the United States. The rapid increase in population has left the city severely lacking in adequate housing. Most of the livelihood comes from manufacturing,
shipping, lumbering, and agriculture. Numerous processing industries have been attracted of late years by the cheap power from Bonneville Dam on the Columbia River.

The State of Oregon takes pride in the accomplishments of its military forces. The Oregon 162nd Infantry holds the record of seventy-six days continuous contact with Japanese forces in the New Guinea Campaign at Salamau. The State proudly points to the record of the Guard in both world wars and its record as the 3rd. Oregon on the Mexican border with General Pershing.

When the Federal Government offered the State an increase in the quota of National Guard troops, it accepted. At present, the Guard consists of 93 units organized since World War II.

In Portland, as in the rest of the state, the citizens generally support the program of the National Guard. Many of the larger business firms permit their employees to take military leave in addition to regular vacations to attend special service schools and annual Guard summer training camps. This has a vital effect on securing desirable persons for the Guard units.

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Sources of Data and Methods Employed in the Study

The major source of information used in this study was from the personal observations of the author while assigned to the duty described. War Department directives were carefully studied to learn the exact nature of the assignment that was to be accomplished. Service journals were included in order to learn of the problems and methods used by other Regular Army officers assigned to National Guard duty.

Light Aviation Advisors in other states were visited in order to observe their problems and study their methods. Further background information was obtained from Regular Army instructors, presently in Oregon, who had been National Guardsmen before the last war. Their suggestions materially aided in the development of an appreciation of the problems of the Guardsman from his point of view. It also aided in understanding the prides and prejudices of the National Guardsmen and in learning the traditions of the Oregon National Guard.

The data for the historical chapter were obtained by a study of the 41st Division History, by personal interview of the officer who commanded the 3rd Oregon on the Mexican border in 1916 and by interviewing persons long associated with the Guard.
The study is limited to only the light aviation sections assigned to units of the Oregon National Guard. It deals with the problems of organizing, administering and training these sections.

**Definition of Terms Employed in the Study**

The following names and terms are herein defined in order to explain their meaning as they are used in the study.

- **Adjutant General, State.** The Governor's military representative. He directs the activities of the National Guard in the state.

- **Air Officer.** The senior pilot of any air section. He has the dual status of pilot and advisor to his commanding officer on the use of light aircraft.

- **Airplane, liaison.** A light aircraft, usually of less than 200 horsepower, capable of slow speeds and of landing and taking-off from unimproved roads and strips. The airplanes are a part of the Army units and are used in aerial reconnaissance and in the adjustment of artillery fire against enemy targets.

- **Armory Drill.** A weekly 2-hour period during which a National Guard unit assembles in its assigned armory building for organized training and drill.

- **Army Field Forces.** A new designation to include all troops
of the Department of the Army other than supply and administrative. These include all of the Army's combat divisions.

**Commanding Officer.** The senior officer present in any unit from company to the highest level. He has the authority and responsibility of command.

**Forty-First Division (Part).** That portion of the Forty-First Division National Guard which is stationed in the State of Oregon.

**Howitzer.** An artillery weapon having a medium-length barrel capable of propelling high explosive projectiles into enemy territory at ranges up to twenty thousand yards.

**Instructor, Army.** An officer of the Regular Army detailed to duty for instructional purposes with the Army components of the National Guard.

**Light Aviation Advisor.** An officer of the Regular Army who has been detailed for a tour of duty with the National Guard for the purpose of assisting in the organization and training of light aviation sections. He is a rated Army pilot on flying status.

**Light Aviation Section.** A unit consisting of a minimum of one pilot, one mechanic and an airplane organized into a section as a part of a headquarters company, or battery, for the purpose of providing aerial observation for the unit.
Mortar. An infantry weapon having a short tube and a high angle of fire capable of propelling various projectiles into enemy territory at ranges up to forty-five hundred yards.

National Guard. That portion of the military establishment consisting of the military forces of the individual states and territories. This term applies to what was formerly the state militia forces.

National Guard Bureau. A headquarters set up in the Department of the Army for the purpose of administering National Guard affairs.

Organization. A term used as a noun to describe a military group combined into an integral unit such as a company, battalion, regiment, or division. An organization has a specific designation such as 218th Field Artillery Battalion, or Headquarters Company 186th Infantry.

Pilot, Army. A pilot trained in the use of liaison-type aircraft assigned to an Army unit.

Reconnaissance. A term applying to the process of obtaining items of military information.

Registration. A process by which the fire of a mortar or artillery piece is brought to bear upon a target in enemy territory. By registration, all the guns of a battery or battalion are adjusted upon one object usually designated as the Base Point. This serves as a basis by which fire
is shifted to other targets in the vicinity.

**Surveillance.** The act of keeping constant observation of enemy territory for any enemy activities that may appear.

**Unit.** A self-contained organization capable of supplying, administering and transporting itself independently. It usually applies to a battalion or regiment.
CHAPTER II

HISTORY OF THE NATIONAL GUARD

The National Guard is made up of citizens of the United States whose interest in national defense has prompted them to take an active part in military matters outside of the time devoted to their regular professions and occupations. There are National Guard units in each of the forty-eight states, Hawaii, Porto Rico, Alaska and the District of Columbia. The National Guard contains units of all the different arms and services that go to form a modern army.¹

The history of the United States National Guard dates back to the period preceding the founding of the American Republic. Our forefathers in pioneer settlements, banded together for protection from the Indians, required the enrollment of all able-bodied men and held regular periods of drill. Such forces belonging to the colonies and then later to the States were known as militia from the term miles or militis, a French word meaning soldier.

"The obligation to contribute military service in defense of the common safety is as old as the law of self-preservation."²

¹Officers' Guide, p. 18.
²Ibid., p. 413.
"Men of all races, and wherever found have accepted this obligation as an inherent part of communal existence. In the first chapter of Numbers, the Bible relates that Moses and Aaron registered and classified the Jews and placed 603,551 in Class I.

The greatness of Rome was built upon its citizen soldier who furnished his own arms and equipment and served for ten years or longer without pay. The decline of Rome came when its defense was wholly entrusted to professional troops and the citizens lost their skill with arms."

In the earliest Anglo-Saxon days every free man was obliged to respect the summons to arms. The Norman kings continued the ancient militia and extended its liability to service on foreign soil. The old English fyrd or militia was the Nation in Arms. Service was incumbent upon all able-bodied men between sixteen and sixty.

Early American Militia

The theory of drafting soldiers in the United States is as old as white America.

"The Constitutional Congress, among its earliest measures for the common defense, 'recommended to the inhabitants of the United English Colonies that all able-bodied effective men, between sixteen and fifty years of age be formed into companies of militia.' (July 18, 1775.) Washington proposed to the First Congress, a true selective service, hoping to develop

3Officers' Guide, p. 413.
4Ibid., p. 413.
an effective citizen army. Jefferson and Madison made similar strong recommendations. Their proposals never became law. Instead, the Militia Law of 1792 was enacted providing for universal military service."5

Colonial History of the Militia

The militia of the Colony of Massachusetts were the first troops to see action in the American Revolutionary War. It was these "Minute-Men" who engaged the British regulars in the historical Battle of Lexington.6

Militia of the thirteen colonies played an important role in the conduct of the Revolutionary War. A total of 395,864 troops were recruited during the war and of this number, 164,087 were militia. Known as the Provincials, they were raised and maintained by the Colonies. Enlistments in the militia were usually for three months, for a particular campaign, or in some instances for a battle.7

"In 1792 the first federal militia law passed provided for the enrollment for military duty of all able-bodied, white, male citizens between the ages of eighteen and forty-five. Each militia man was expected to provide himself with a 'good musket'. No federal control was contemplated in this enactment. Pennsylvania raised a force of its own as a means of controlling the Indians in the Northwest Territory,

6Fiske, p. 178
calling it 'militia'. Virginia, Massachusetts, and the Carolinas followed this example. The 'Whiskey Rebellion' in 1794 required the use of the militia of several states under General Washington.  

Patriotic citizens under State control formed military units in towns and cities throughout the nation. Many of these fine old organizations cherish a history which includes participation in all of our wars, and carries back to the very beginning of the United States and its revolutionary struggles.  

Provisions for a Militia in the Constitution

The concern for the national defense gave provisions for a militia a prominent place in the drafting of the Constitution. The oath of office in the Army includes the clause "That I will support and defend the Constitution of the United States against all enemies, foreign and domestic..." The Constitution makes numerous references to the militia:

The Preamble states: "We, the people of the United States in order to form a more perfect Union...provide for the common defense..."

Section Eight of Article One gives the Congress the following powers relating to National defense;

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9 Ibid., p. 21.
1) to pay the debts and provide for the common defense and general welfare of the United States;  
2) to declare war... 3) to raise and support armies... 4) to make rules for the government and regulation of the land and naval forces; 5) to provide for calling forth the militia to execute the laws of the Union, suppress insurrection and repel invasions; 6) to provide for organizing armies and disciplining the militia, and for governing such part of them as may be employed in the service of the United States, reserving to the States respectively, the appointment of the officers and the authority of training of militia according to the discipline prescribed by Congress."

Section 2 of Article II defines the powers and responsibilities of the President, including those matters which relate to the National Defense as follows:

"1) The President shall be Commander-in-Chief of the Army and Navy of the United States and of the several states when called into the actual service of the United States..."

Article Two of the ten original amendments states "A well regulated militia being necessary to the security of a free state, the right of the people to keep and bear arms shall not be infringed."

Revolutionary War to Modern Times

The militia has played an important part throughout all the major military operations of the United States. In each case of national emergency, state militia were organized and called into federal service. "At the time
of the Spanish-American War there were some 1600 companies of militia..."10

"During World War I, National Guard Units of the various states and territories contributed nearly half a million men to the Army. Two out of every five divisions that went to France were National Guard Units..."

The National Guard met the emergency of 1940. Eighteen infantry divisions and other troops moved into training camps from which they departed for combat service to every corner of the globe.

Acts of Congress Affecting the Militia

The actual origin of the name "National Guard" came with the passage of the "Dick Act" of 1903, sponsored by Elihu Root, then Secretary of War.11 The provisions of this bill "...paved the way for the division of the organized militia into an effective military force constituting a vital portion of the Army of the United States."12 It provided:

" 1) That the organization, arming and disciplining of the Organized Militia be the same as that of the Regular Army; 2) It authorized the Secretary of War to issue to the militia, at the expense of

12Ibid, p. 29.
the Federal Government, ammunition and supplies provided for the Regular Army; 3) for regular inspections by Army Officers and regular returns by the state Adjutant Generals; 4) for the participation by the Organized Militia in joint maneuvers with the Regular Army; those participating to receive pay, subsistence and transportation from appropriations for the support of the Army; 5) for separate state encampments through an annual appropriation of one million dollars and two millions for arms and equipment; 6) for the detail of Regular Army Officers to state encampments as instructors; 7) for a means of qualifying personnel for commissions in the volunteers; 8) for a tactical organization of the force... 9) the Division of Militia Affairs was organized in the War Department for administration of the Organized Militia.\textsuperscript{13}

The status of the National Guard was further improved by the Act of June 3, 1916, which provided additional financial assistance, Federal recognition and control.\textsuperscript{14}

The National Guard Bureau is a part of the War Department which is maintained to facilitate the administration and development of the National Guard while not in federal service. The chief of the bureau is appointed by the president from a list of officers of the National Guard.

Present Organization

With the passage of the Dick Act of 1903, the National

\textsuperscript{13}\textit{Officers' Guide}, p. 21.
\textsuperscript{14}\textit{Ibid.}, p. 21.
Guard was expanded to include every type of unit present in the Regular Army. To meet the growing demands for new services and functions of the various components additions have been made paralleling the Regular Army.

A Regular Army Instruction Group is assigned to each state to "further the efficiency of the unit--to which they are assigned through appropriate assistance and advice to the responsible commander."^{15}

In keeping with the trend of expanding the services, light aviation sections have been added to infantry and artillery units for use in adjusting artillery fire, gaining information of the enemy, making aerial reconnaissance and performing special missions for the ground forces. These air sections constitute a part of the respective artillery and infantry organizations to which they are assigned. While these ground units do have airplanes, they are not a part of the Air Corps or what is now the separate Department of the Air Forces. The activities of the Air Forces have no bearing on this problem as they are entirely separate and unrelated.

To assist in training these air sections of the infantry and artillery, Army liaison pilots were assigned to the Senior Army Instructor of each state "to conduct such

^{15} National Guard Regulation Number 40, Par. 12a.
technical inspections as deemed necessary by the Army Commanders,"\textsuperscript{16} and as many of the pilots in the Guard were former Air Force pilots, unfamiliar with light airplanes or the requirements of Army flying "to conduct operational training courses in order to qualify AAF pilots locally."\textsuperscript{17}

This program was put into effect in October of 1947, and the first group of thirty liaison pilots, of which the author was one, reported to their stations in the States on November of that year.

History of the Oregon National Guard

The Oregon National Guard was first organized in 1887. This was an outgrowth of previous volunteer companies organized to serve as protection against the Indians.\textsuperscript{18}

Following the passage of the Dick Act of 1903, the National Guard of Oregon became a part of the 41st Division, composed of troops from the states of Oregon, Washington, Idaho and Montana. Oregon National Guard troops first saw Regular service when the 3rd Oregon Infantry Regiment

\textsuperscript{16}National Guard Bureau, letter dated 28 October 1947, par.4. Appendix Item No. 6.
\textsuperscript{17}National Guard Bureau, letter dated 28 October 1947, par.3. Appendix Item No. 5.
served on the Mexican border under General Pershing in 1916.

The Oregon National Guard next saw combat service under the familiar red-gold and blue insignia of the 41st Infantry Division in World War I. "But it was the destiny of the original Sunset Division, after it reached Europe to be broken up and to have its men used as replacements in other divisions. Consequently, the original 41st Division, the fifth division to go overseas, was denied the distinction of fighting as a unit."19

After World War I and the return from France, the Guard was reorganized to include signal, medical, quartermaster and engineer units under the authorization of the Act of 1903. Oregon also had one Air Corps unit, the 132nd Observation Squadron. Training of the Oregon portion of the 41st Division continued through the intervening years to include participation in large, full-scale maneuvers with Regular Army troops of the 3rd Division at Ft. Lewis in 1937.

Because of the gathering war clouds in Europe in 1940, the 41st Division, including the Oregon 186th and 162nd Infantry and the 218th Field Artillery Regiments, was one of the first four National Guard Divisions inducted into federal service on September 16 of that year. After a

19McCartney, p. 1.
year's training at Ft. Lewis, Washington, it was the first American Division to sail for overseas after the bombing of Pearl Harbor and our entry into the war.

The Division arrived in Australia in April 1942 at about the time General MacArthur left the Philippines to organize the first offensive against the Japanese in the Southwest Pacific. The Division first saw action on January 2, 1943, at Sananda in the Papuan Campaign. 20 From then on, the history of the division was that of fierce fighting over almost impenetrable terrain against disease, infection and the jungle, as well as against the fanatical Japanese.

The combat finally ended in Mindanao on July 4, 1945, after three years of almost continuous operations characterized by amphibious assaults against enemy-held jungle beachheads. 21

With the Japanese surrender, the Division moved to the occupation of Japan and were eventually de-activated on December 31, 1945, for return to the States. For many officers and men, this meant the end of nearly four years of overseas service.

Following World War II, the State colors were

20 McCartney, p. 166.
21 Ibid., p. 166.
officially returned to the Governor in 1946 and the reorganization of the Oregon National Guard began. Major General Rilea who served overseas with the 41st as assistant division commander acceded to the post of State Adjutant General with headquarters in the state capital at Salem. Again as before, the 41st Division was split, this time between the two states of Oregon and Washington with the Division Headquarters this time going to the northern state. The quota for Oregon at present includes a small detachment of the Division Headquarters, the 162nd and 166th Infantry Regiments; Headquarters Division Artillery; the 218th and 965th Field Artillery Battalions; and the 162nd Engineer Combat Battalion. The senior field commander in Oregon and assistant Division Commander is Brigadier General Claude V. Maison, present superintendent of State Police.

Following the end of World War II and the separation of the Air Corps into a separate Air Force, Oregon received in addition to the Army units, an Air Force National Guard unit consisting of an Air National Guard Group, base detachment and one fighter squadron. As this constitutes a separate branch of the military service, having no bearing on the problems of this study, no further reference will be made to it other than to state that these units were based at the Portland Army Airbase and jointly occupy
some of the same buildings used for light aviation sections of the 41st Division units. Their activities are entirely separated from those of the air sections of the artillery and infantry units with which this study deals.

The higher headquarters of each of the 41st Division units are based in the Portland area and occupy buildings formerly used by the Army Air Forces during the war. The Regular Army Instructor Group occupies a building in the same area. The Light Aviation Advisor is stationed with this group in Portland.

Light Aviation Sections of Oregon National Guard

At the present time, the following units of the Oregon National Guard have fully organized light aviation sections: Headquarters 41st Division Artillery, 218th and 965th Field Artillery Battalions and the 162nd and 186th Infantry Regiments. A recent order places all air sections under the control of Headquarters 41st Division Artillery, giving a unity of control for training.

Recent Developments Affecting Light Aviation Sections

The air sections of the two infantry regiments have been affected by a change in their Tables of Organization Equipment.\textsuperscript{22} Under the re-organization, the air sections

\textsuperscript{22}Tables of Organization and Equipment No. 7-14.
were removed from the regiments and assigned to the Division Headquarters Company which is in the State of Washington. However, recent developments indicate the two air sections concerned will remain in Oregon attached to their former organizations.23

At the beginning of the year, it was decided to group all the artillery units in the Portland Area. This necessitated the transfer and re-organization of the 965th Field Artillery Battalion from Klamath Falls to Portland. This was accomplished on April 8, 1949.

In order to insure that government equipment is receiving proper care and maintenance, Federal funds have been made available for the employment of qualified civilian caretakers. These caretakers must be members of the National Guard and hold appropriate positions in their units.24 Each light aviation section is entitled to one full-time caretaker mechanic per each two planes to maintain assigned aircraft and air force equipment.25 These men perform necessary maintenance and servicing and keep the planes available for use of the pilots in their flight.

23 Letter, National Guard Bureau, dated 4 March 1949.
24 National Guard Bureau Circular No. 32, Par. 14.
25 Logistics Bulletin No. 2, Par. 5h.
Summary

In summarizing the history of the Oregon National Guard, the following pertinent points are herein included:

1. The National Guard of the United States is as old as the country itself, dating back to the earliest colonial days.

2. The growth of the Guard has kept pace with the increased number of services found in units of the Regular Army.

3. The Acts of 1903 and 1916 have provided the backing and set the pattern for the modern National Guard.

4. The Oregon National Guard was first organized in 1887 from volunteer companies previously organized to provide protection of the settlers from the Indians.

5. The Oregon National Guard has seen service in the Mexican Campaign and both World Wars.

6. Since 1903, the Oregon National Guard has been a part of the 41st Infantry Division comprising the northwestern states of Washington, Oregon, Montana and Idaho.

7. At present, the Oregon National Guard has five light aviation sections assigned to artillery and infantry units.
CHAPTER III

EXPLORATION AND SOLUTIONS OF THE PROBLEMS OF THE STUDY

The following problems were found to be the major ones which affect the training of the light aviation sections of the Oregon National Guard at the present time. They were grouped under the three general headings of educational, economic and sociological problems and are here discussed in detail.

Methods Used in the Study

The philosophical approach was used in this study. By this method it was possible to investigate each of the individual problems encountered and to discover its relationship to the others. The field consists of not one, but a group of problems whose inter-relationships determine the degree of success that will be achieved. Therefore, it was believed appropriate to proceed by way of a synthesis of the results of a number of researches in order to gain an understanding of the problem as a whole.¹

Educational Problems

1. Time Limitations. Because of the civilian status

¹Foote, p. 12.
of the National Guard, the training of its personnel must necessarily be limited to a part-time activity. Guardsmen must devote their effort to supporting themselves in a civilian occupation and therefore cannot be full-time soldiers. Their training activities consist of attendance at a 2-hour armory drill period each week and an annual 15-day summer training camp.2

During armory drill periods, the light aviation pilots and mechanics hold classes of instruction in ground school subjects such as Tactics, Meteorology, Cross-Country Navigation, supply and Aircraft Maintenance.3 During summer training camp, the Guard takes part in field maneuvers and the light aviation sections work with their respective units in adjusting artillery fire and performing aerial reconnaissance missions.

The pilots must find time other than scheduled drill periods to make periodic inspections of their aircraft, take care of administration and perform aerial flights. Often pilots perform these duties during their free periods on week-ends.

The entire training program is aimed toward the accomplishment of certain objectives which have been prescribed

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2National Guard Regulation No. 45, pars. 10, 27.
3Department of the Army Field Manual No. 20-100, par. 11.
by higher authority in the National Guard Bureau in Wash-
ington. The objectives of the training program are as follows:

a. Individual

1) To develop and qualify personnel of all grades to perform all duties which reasonably may be assigned to them both in peace and for mobilization.
2) To develop personnel who can be utilized as instructors.
3) To develop personnel capable of applying the most up-to-date technique in the use of equip-
ment assigned.
4) To maintain such standards of mental and physical fitness as are necessary for active field duty.

b. Unit

1) To insure that all units will be capable of immediate mobilization and field service with a minimum of time required for field training prior to commitment to actual combat operations.

c. Additional objectives for officers...

1) To prepare by progressive selection and training, officers to assume command and staff responsibilities of all echelons up to and in-
cluding highest levels...

This investigation deals with the treatment of these objectives only in so far as they apply to light aviation section training. The Guard must accomplish these training objectives through attendance at 48 two-hour drills and a two-week summer training camp.

^National Guard Regulation No. 45, par. 4.
A light aviation section consists of one airplane for each infantry section and two for each artillery section, and for each airplane there is an officer pilot and an enlisted mechanic. Each section includes the necessary vehicles, tools, supplies, records and equipment for its operation under field conditions. For maintenance purposes, the National Guard Bureau authorizes the Guard to hire one caretaker mechanic on a full-time basis for each two airplanes.\(^5\) The caretaker mechanic must be a member of one of the light aviation sections. The senior pilot of each section is the Air Officer. He is responsible to the unit commander for the organization, maintenance and training of his light aviation section.

To overcome the handicap of limited time for training, the advisor secured copies of air training outlines prepared by the Air Training Department at Ft. Sill.\(^6\) These outlines cover every subject pertaining to light aviation section training. An officer assigned to teach a class can readily prepare himself by the use of these training outlines. This has effected an appreciable saving in time over former methods of preparing lessons by which materials had to be gleaned from numerous manuals, technical

\(^5\)National Guard Bureau Logistics Bulletin, No. 2., p. 2.
\(^6\)Appendix, Item No. 1.
orders and army regulations.

In order to save the Guardsmen's time and yet gain the greatest amount of benefit from training flights, the Advisor has arranged for a demonstration to be put on by the Regular Army pilots of the Second Infantry Division at Ft. Lewis during summer camp in June. It is thought that once the pilots gain a clear picture of the program they will be able to utilize their flying time to better advantage.

Much of the training of Army pilots involves practice in making landings on short unimproved fields and narrow roads. The Advisor arranged for the use of a part of the state-owned Clackamas rifle range as a practice field. This field is within a few minutes flying time from the Portland Airbase making it possible for a pilot to practice eight or ten short-field landings during an hour's flying.

By means of the steps taken to facilitate preparations for classroom instruction and in providing a nearby practice landing area, the handicap of limited time for training is being overcome, making it possible for the members of the air sections to accomplish the individual and unit objectives previously stated.

2. Limited Facilities. The general efficiency of the air sections has been affected by inadequate facilities. These deficiencies are of two types, namely a lack of
hangar space, and secondly, inadequate training facilities.

At present, there is no hangar space for the liaison planes nor a suitable place for their maintenance. They are tied-down in the open where they are exposed to the weather and are moved into the nearby Air National Guard hangar for maintenance only during inclement weather.

The more important problem affecting the accomplishment of the training objectives is the lack of suitable practice landing strips and roads by which the pilots can maintain their proficiency in short-field landing techniques. To do this requires weekly practice landings on short strips, roads, and unimproved fields. None are available in Portland.

The Advisor has assisted the State Maintenance Officer to provide for hangaring the planes by making a survey of types and cost figures on five different types of hangars in civilian use in the area. As State funds were limited, he altered the plans to provide a suitable type hangar that could be constructed largely from salvage lumber and materials available on the airbase. Plans for the hangar are included in the appendix.7

Suitable landing strip areas are being provided. A small field at Clackamas has been obtained for a practice

7Appendix Item No. 2.
landing area near Portland and simulated barriers have been erected.

State-owned property at Camp Adair, about sixty miles south of Portland has been secured as a site for the construction of additional landing strips. Unused streets in Camp Adair have been cleared for use in practicing road landings and arrangements have been made for the construction of more difficult strips on the edge of an adjoining rifle range. This latter area offers opportunity for a variety of different short-field landing situations.\(^8\) This project has been approved by the State Adjutant General and it is believed that construction will start shortly.

With the construction of a separate liaison hangar at Portland and the construction of additional landing strips at Camp Adair, the major problems of shortages of facilities will have been met.

3. **Distant and Remote Objectives.** At the present time the National Guard does not meet an immediate need in the community. Consequently, it must function in a situation that is lacking in immediate objectives. This situation appears to produce an attitude of complacency and unconcern in the individual Guard members. This is evidenced by the slowness in which they prepare their training

\(^8\)Appendix, Item No. 5.
schedules and the lack of concern about the care of their equipment.

They do not feel that they will be mobilized for combat in the near future and consequently show little concern about reaching their training objectives. Three former Air Force pilots have been in the Guard for over a year and have not yet completed a 20-hour training program necessary to qualify them as Army pilots.9

The solution of this problem has been found in emphasizing the more immediate advantages of Guard membership. These advantages are drill pay, fraternity, travel, recreation and schooling.

The drill pay of a captain on flying status is $52 per month. This amount will make payments on a house or help to buy a car. With a probable decrease in the availability of jobs, this item is becoming more important. Two of the pilots referred to above have lost their previous jobs and at present are working on a part-time basis. The Guard pay is a very important source of income for them and their families.

Because of the fraternal nature of the Guard it affords an opportunity for individuals to belong to and participate in the activities of a group whose members share similar

9Appendix, Item No. 5.
experiences. Through the Guard youg men may associate with others of their own age, background and interests. As all of the pilots are veterans, an opportunity is afforded to review their wartime experiences and to re-live memories of times spent in Paris, Sydney, and London, which are dear to the heart of every veteran.

For many persons whose economic circumstances normally restrict them to the limits of their home city, the Guard offers the opportunity for travel at government expense. National Guard pilots are free to make cross-country flights up to 1000 miles from their home station, with state permission; and longer trips when they are approved by the National Guard Bureau. They fly National Guard planes at government expense. In addition, they are eligible to ride in any government aircraft to any point in the United States as long as they are wearing their army uniform.

The Guard offers pleasant recreational opportunities such as week-end marksmanship matches. With the attainment of sufficient skill and participation in elimination matches, trips to participate in National matches are possible. Another recreational opportunity is found in the many points of interest to be visited in the vicinity of summer training camps and Army service schools.

The Guard offers the opportunity for attendance at any of the Army service schools from the lowest basic branch
school to the Army War College. This includes attendance at Army liaison pilot schools where a pilot receives a higher quality of flight instruction than he would obtain in a civilian course under the GI Bill. For any Guardsman interested in improving his military proficiency, the opportunities of Army schooling attended on full pay are a real incentive. These Schools vary from refresher courses of a few days to the pilot's course of nine months. The short courses are within reach of nearly any Guardsman and the longer courses are available to many whose employers allow them military leave for extended periods. This opportunity is also open to employees of the federal government and policemen of the city of Portland.

Such features are strong inducements to persons who contemplate joining the Guard. These incentives, in addition to the more remote objectives of meeting personal obligations in the interest of national defense, have a strong effect in attracting new members and maintaining the interest of the old.

4. Limited Authority of Regular Army Instructors.
The Regular Army Instructors, including the Light Aviation Advisor, have no command authority over the National Guard.11

10 Light Aviation Training Program, Par. 5.
11 National Guard Regulation No. 40, par. 12.
The National Guardsmen themselves recruit, organize, train and command their own units. The duties of the Regular Army instructor personnel are limited to advising and assisting them in these activities, but they cannot give orders to any members of the Guard. The Constitution guarantees the States the right to control the Guard.12

The Light Aviation Advisor can assist in organizing and training the light aviation sections, but can take no direct steps to stop illegal action or require specific performance.

This situation is illustrated by the case of one of the pilots who flies without a parachute even though it is required by Flying Regulations. Another pilot failed to prepare his light aviation section for a federal inspection and did not prepare a training schedule. In none of the above cases, did the Advisor have authority to take direct corrective action.

The procedure developed by the Advisor in meeting these situations was to impress the pilots with the importance of following the regulations that have been prescribed by higher authority for their use in the present peace-time organizations. Most of the Guard pilots had served in combat where restrictions were much less strict and exacting.

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12Constitution of the United States, Article I, Section 8.
The Advisor has taken numerous opportunities during armory drill sessions to explain these regulations to the pilots and convince them of their importance. Many of the pilots were unfamiliar with the newest regulations in force and these have been described and explained. He has further discussed the importance of the proper care and handling of government property and has warned them of the action that will result when inspectors find unsatisfactory conditions existing or that regulations are not being obeyed.

This program of instruction has been very effective in limiting the number of minor violations of rules and has caused the pilots to take more of an interest in caring for the equipment in their sections. By this method many of the results have been achieved indirectly when the Advisor was lacking in the authority to take direct action.

Specific performance by the pilot who failed to prepare the necessary training schedule was obtained in this way: The Advisor informed the Artillery Instructor, the Senior Instructor, and the commander of the unit concerned that the air officer had been conducting no training classes. Then a letter, written by the Artillery Instructor with the assistance of the Advisor, was prepared for the Senior Instructor's signature and sent to the Division Commander stating that the training of the pilots was being ignored
and recommending specific practices be followed. The Division Commander gave his approval and directed that the recommendations of the Instructor be carried out. With this direct attention from the top level of command, all units hastened to look to their long neglected air sections and a conference was called to prepare a training program. The Advisor and the Artillery Instructor were invited to attend and helped outline the program. The air sections were combined under Division Artillery Headquarters control for training. The air officer was clearly informed of his responsibilities by the National Guard Operations Officer and directed to prepare such a program within one week. This he did with the Advisor's assistance. For the first time in over a year a program for the Light Aviation Sections was prepared, approved, and published by the Artillery Headquarters. This approach represented an extreme measure but by its use definite progress has been made. The situation will now be kept in hand by means of close supervision by the Advisor and by his keeping the responsible unit commander informed of the progress of the air sections.

5. Lack of Primary Motivation. The training and organizing of the National Guard units is often retarded

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13 Appendix, Item No. 4.
by a decided lack of effort on the part of the members. Many fail to assume their responsibilities in the positions they hold. Some show more concern over drawing their drill pay than they do about the organizing and training of their units. Some of the pilots fly the airplanes without attending to the other problems of administration and maintenance that are necessarily associated with belonging to a light aviation section. Apparently the feeling exists that many Guard duties don't have to be performed. Such a feeling is evidenced by one of the air officers who has neglected his air section entirely except to go flying.

This problem of lack of primary motivation was approached by means of setting up numerous intermediate goals which the organizations must reach by certain scheduled times.

For the light aviation pilots who formerly were with the Air Corps, this means the completion of a 20-hour flight training schedule\textsuperscript{14} within one year from the date they received their federal recognition.

For the air sections as a whole, a 3-year National Guard Training Program has been provided by the National Guard Bureau with a definite amount of training to be

\textsuperscript{14}Light Aviation Training Program, par. 5.
accomplished during each of the three years. For the mechanics this includes the training of ground crews in the ground handling of airplanes, maintenance and servicing of aircraft, camouflage, selection and lay-out of landing fields and the use of communication equipment. For the pilots this includes precision flight maneuvers, short-field landing practice, supply and administration of air sections, air section operation, and the tactical employment of air sections.

By the use of these goals which are specified by the National Guard Bureau, the air sections are required to organize and conduct a program of progressive training so that within three years it will give every member a complete course of training in both basic and advanced subjects.

This program can be enforced by the Advisor by supervising the training and reporting deficiencies noted. Unsatisfactory conditions not corrected can serve as a basis for withdrawing federal recognition from the officer or unit concerned.

Through this method intermediate goals can be set which will require the progressive training of the light aviation sections over a given training period.

15 National Guard Training Program, No. 6-12-21 N.
16 National Guard Regulation, No. 45, p. 11.
Economic Problems

1. National Guard Interest Second to Vocational. In a National Guard unit, the personnel are all civilian and their first concern must necessarily be with earning a living. Many of the Guardsmen are veterans whose education and start in a vocation has been interrupted. They have returned to their former jobs to find that changes have taken place while they were gone so that they must again start at the bottom. When starting on a new job, they find they are entitled to few privileges, such as taking time off to go flying or securing military leave to attend summer training camp or any of the Army service schools.

Though a Guardsman is paid for armory drill, he must still give his major effort to raising the level of his civilian pay -- often at the expense of the Guard activities. For example, one pilot is employed as a railroad trainman and is often out of town for several days at a time during which he misses the armory drill. The Division Artillery Air Officer has not prepared a training schedule for summer camp partly because his civilian employment interferes.

A plan has been worked out to encourage greater participation in Guard activities by making facilities more readily available for the pilots to perform their scheduled flights and in furnishing the necessary training materials
for use in armory drill instruction.

The schedule of the caretaker mechanics has been altered so that one is present on the flight line on the week-ends to service the planes whenever the pilots can fly. A system of scheduling the planes has been devised to assist the pilots in making their required cross-country flights. The Light Aviation Advisor has spent his week-ends on the flight line to instruct the pilots in flying the new L-17 airplane.

Another means of overcoming this problem of the Guard activities being secondary to vocational has been through a program of keeping the pilots informed of the many direct benefits that are available to them if members of the Guard. The opportunity for Guardsmen to maintain their military proficiency by attendance at Army service schools at full pay is a strong inducement. One prospective light aviation officer is joining the Guard in order to attend the Army liaison pilot school where he will draw the full pay of a second lieutenant for nine months. The opportunity to travel free of charge in government aircraft has saved some air section men several hundred dollars in transportation costs on trips they have taken.

2. Limitations of State Funds for the National Guard.

The maintenance of a National Guard organization places a heavy responsibility upon the state. Though the federal
government furnishes military equipment, the State must provide for its operation and maintenance and provide suitable housing for all of its units.\textsuperscript{17} To meet the requirements of the entire state requires that the funds available be used as sparingly as possible. The light aviation sections are faced with a need for hangar facilities and landing strips.

The survey of types of hangars\textsuperscript{18} referred to earlier was made to obtain ideas on building satisfactory hangar space at minimum cost to the State. The materials for this construction may be obtained from salvage buildings on the Portland air base made unserviceable by the June 1948 flood.

The construction of landing strips involves considerable labor and the employment of heavy engineering equipment.\textsuperscript{19} A plan is being worked out by the Advisor and the Artillery Instructor to utilize the equipment and personnel of the National Guard Engineer Battalion to perform the work as a training project.

3. Requirements for Drill Pay. A National Guard pilot receives one day's pay for the two hours spent in weekly drill. However, this pay must also compensate for

\textsuperscript{17}National Guard Regulation No. 50, Par. 7.
\textsuperscript{18}Appendix, Item No. 2.
\textsuperscript{19}Appendix, Item No. 5.
the additional time he must spend on training flights, preparing instruction material and handling the administration of his air section.

From past experience with the present air sections, the amount of time that must be spent by a National Guard pilot each week in taking care of his air sections was found to be as follows:

Scheduled Drill . . . . 2 hours
Preparation for Drill . . 2 hours
Training Flight . . . . 1 hour
Inspection of forms, records, airplanes, and attention to problems of supply. . . . 1 hour
Total . . . . 6 hours

The performance of these duties requires at least two trips per week to the air base by the pilot. This requires that one entire evening and the equivalent of one-half day's time be spent on air section activities each week. Thus a considerable amount of time must be taken from an individual's personal time and time spent in earning a living. Compensation for this time is received in the form of drill pay.

A National Guard officer receives the full day's pay of an officer of the Regular Army for attendance at each
week's drill period. Pilots who are on flying status receive an additional fifty per cent of their base pay for the performance of flying duties. Pilots on flying status receive the following weekly pay:

- Captain .......... $12.65
- First Lieutenant .... $11.00
- 2nd. Lieutenant .... $8.75

Based upon the six hours of time found by experience to be necessary for the discharge of air section activities, the hourly rate of pay is $2.10, $1.83, and $1.45, respectively.

Additional compensation for time spent on air section activities is received in the form of additional opportunities and advantages. The opportunity to fly the new National Guard planes at no personal cost to the pilot on both local and cross-country flights is a saving to him of from eight to twenty dollars an hour based on present rental rates at Portland civilian flying schools.

The Guard offers the opportunity to attend any Army school on full pay with travel expenses furnished. Through this opportunity the officers and enlisted men can improve their military knowledge and enjoy an occasional trip at government expense. One of the present pilots is attending an intelligence school at Ft. Riley, Kansas, for a period of three months on the pay of a second lieutenant.
Those who are members of the air sections will spend their vacation on Army pay at Ft. Lewis during summer training camp. They will be able to fly every day and enjoy the recreational facilities of the post during off-duty hours.

These opportunities plus the drill pay are provided to compensate the pilot for the time he must devote to his air section.

4. Unavailability of Certain Desirable Persons. Due to demands of the Guard upon a pilot's time, many well-qualified men have been unable to take the necessary time away from their businesses to join the Guard. Some persons who have businesses of their own or hold an important position in some large business organization are devoting their entire attention to their occupation and do not feel they have the time to give to Guard activities.

This is illustrated in the case of a man who had been a liaison plane mechanic with an artillery unit during the war. His qualifications and experience made him an excellent choice to fill one of the vacancies in the air sections, but he owned a service station where he spent long hours building up his business and did not have time for other activities. In another instance, a prospective pilot with wartime experience holds a college degree, yet he is one of the owners of a furniture business and does not
have time for Guard activities.

The problem of getting these desirable persons interested enough in the Guard that they will find time to enter into its activities has been approached by means of numerous visits and interviews showing them that in joining the Guard they will have the opportunity to preserve their wartime skills and continue their training in military subjects while still retaining their civilian status. This they can do without leaving their homes or businesses. They were shown how they can be associated with men of similar interests. As a result, several pilots have been willing to curtail their personal interests and even lose some of their civilian pay in order to take part in Guard activities. These men are of the highest type and have excellent air sections.

Sociological Problems

1. Social Classes in the Guard. The Oregon State Military and Veterans Code makes no distinctions relative to race, creed or color for membership in the Guard, yet in practice, certain discriminations do exist which tend to develop a social stratification among the units. The units are composed largely of the upper and lower middle class

wage and salary workers. As the Guardsmen recruit their own new members, they choose from their friends of the same social class and discriminate against others, so that eventually the entire unit is composed of men largely of the one class. The other social groups are represented by only a very few members.

This has been evidenced in the selection of pilots for the light aviation sections. Though a large number of reserve pilots have made application, only certain selected ones have been accepted. By this method, four men having good wartime records and holding college degrees have been passed over by the Guard air officers.

Persons of the lower class groups have failed to meet the qualifications set by the National Guard Bureau for either pilot or aircraft mechanic in instances where they were referred to the Advisor for interview and checking. The Advisor and Regular Army Instructors have the authority to examine candidates for positions in the Guard only to determine if they meet the minimum qualifications of intelligence, physical condition, educational level and moral character.  

Persons from upper class groups have displayed more initiative than the others and tend to devote their main

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efforts to reaching higher economic goals and a higher social standing. They have hesitated to assume the responsibilities of a light aviation section in a situation where there is little chance for promotion or social or economic advancement. It has been found that the presence of some of these persons who have joined has raised the efficiency of the air sections of which they are a part. They are being attracted to the Guard by appealing to their sense of patriotic duty and advising them of the opportunities to fly the latest Army planes. As persons of this class become more settled in their civilian lives, they are seeking out the Guard and making plans to join in its program as a recreational activity. One such pilot is now awaiting a position vacancy in the artillery light aviation sections.

2. Selection of Personnel. The selection of personnel for the light aviation sections of the Oregon National Guard has been based largely upon previous associations with the Guardsmen who pick them. Often friendships, family relationships and previous Guard membership count for more in selecting a new pilot or mechanic than the individual's qualifications or experience.

This has resulted in the present artillery light aviation sections having some pilots with low efficiency indexes, lacking experience in liaison flying and
incompetent to perform the duties in the positions they now hold.

The selection of the Division Artillery Air Officer is indicative of the method commonly used: He was selected by a National Guard battalion commander who had known him as an enlisted man in the same unit before World War II. When the war started he left the unit to be an Air Corps pilot in which capacity he served during the war. When he returned to the National Guard, he had little knowledge of artillery tactics and none of liaison flying. He was selected for his present post ahead of a group of four former liaison pilots whom the Advisor had recommended on the basis of their experience, training and military efficiency indexes. These four had had no previous National Guard associations and none were picked.

Two of the present pilots have a military efficiency index below 2.5 which puts them in the barely satisfactory group.

Of the present eleven pilots of the Oregon National Guard, only three have had any previous experience as Army pilots. The rest are former Air Corps pilots.

The pilots with low efficiency indexes are being given special training in an effort to bring their work up to the standard required.

The former Air Corps pilots are being qualified by
giving them a special 20-hour flying course supervised by the Advisor.\textsuperscript{22} By this means they will become competent to handle liaison planes and able to perform the duties of light aviation pilots.\textsuperscript{23}

Two of the pilots who have received captaincies since joining the National Guard seem to be incapable of performing the duties normally required of officers of that rank. However, they are being given training in their new duties and it is hoped that with additional training and experience they will become able to perform their duties satisfactorily.

3. \textbf{Weaknesses in Discipline and Authority.} The traditional standards of authority and discipline found to be fundamental to the performance of military duties is noticeably lacking in National Guard units. Since the units are often recruited from the friends, business associates and relatives of Guard members, enforcing discipline upon such an organization often becomes difficult for the commanding officer. Therefore, in the Guard organizations the status value normally associated with differences in rank in the military is weaker because the people who meet for drill one night a week feel they cannot

\textsuperscript{22}Light Aviation Section Training Guide, par. 7.
\textsuperscript{23}Appendix, Item No. 5.
change their relationships with the men who are their friends, relatives or business associations and so do not insist upon strict discipline. Members of the Guard often fear that insisting upon military discipline on drill night might provoke a family quarrel, prevent a lieutenant from going with the sergeant's sister or cause an officer to lose his job if his boss is the private's father.

While these considerations make the enforcement of military discipline more difficult for members of the National Guard, still it remains a necessary element of the military life for which they are preparing.

This problem is being solved by means of constantly reminding the light aviation sections that with the responsibility for a military organization must go the authority to make it function. The Advisor is helping by defining the areas for which each is responsible and thereby helping each one to better fit into the position he holds with a minimum of friction or misunderstanding. By further pointing out the importance of being well-qualified for the position held, the problems of discipline in the light aviation sections are being solved and the discipline in the units as a whole has improved, as the earlier turmoil and confusion has disappeared.

4. Effects of "Influence". In a civilian military organization such as the National Guard, members can often
secure desirable promotions or advantages through the outside influence they can bring on their commanding officers. This influence may involve their relationship in a business firm where they both work, in a political job appointment, in some family relationship, or be due to long previous friendships.

This is indicated in the case of one of the pilots who was promoted to captain and placed in the position of senior pilot in the Division Artillery Headquarters. This officer, a former Air Corps pilot was not qualified as a liaison pilot as he had not completed the prescribed training course, yet he was given the post of senior pilot and is in charge of the training of all air sections. This pilot was picked over others who had more experience and appeared better qualified. He indicated he had received the promotion by right of having been a good friend of the Division Artillery Commander. Having received this promotion so easily he does not feel moved to assume the duties necessary to handling the light aviation sections.

As the Guard nears completion of its original organization, greater emphasis is being placed by the Regular Army instructors on the standards of unit training that must be achieved and the light aviation sections are being included. By means of gradually insisting upon higher standards of achievement, it is felt that fewer promotions will
be given on a basis of influence, and more attention will be given to the competence of the individuals themselves. That this is beginning to have its effect is indicated by the selection of one of the better qualified pilots for a full-time job over one of the earlier favorites who was less qualified.

5. Effects on Family Life. In many respects the Guard resembles a fraternal organization yet it has an important difference in that no provision has been made for the families of the members to participate in any of the activities. Women's auxiliary and similar units which are present in the American Legion, Masons, Elks, and many other such organizations are not present in the Guard. Subsequently, any time a man spends on Guard activities is spent away from his home and family. There is no provision for his wife or girl friend to meet with other women of the Guard during the time he is at drill.

Many Guardsmen must sacrifice their annual vacation to spend two weeks at Guard summer camp. Instead of taking his family on a trip, the Guardsman is away at camp and the family is left at home. This is an important consideration as it has a definite effect on obtaining members for the Guard and on the manner in which Guard members participate.

Family objections to pilots being away from home have caused them to neglect their Guard duties by failing to
perform weekly practice flights.

In one instance, a promising prospect who had a distinguished flying record as a liaison pilot during the war as indicated by an efficiency index of higher than Excellent, the Air Medal with six clusters and nearly a year of combat experience as a liaison pilot, withdrew his application following the nearby crash of an Air Force B-26 bomber because his wife feared for his safety while flying.

To overcome some of these objections, the following action has been taken: The accidents attributed to liaison flying have been kept to a minimum through a program of flying safety training and strict adherence to the rules governing flying under marginal weather conditions.\textsuperscript{24} With a record of no injuries or death in the Oregon light aviation sections since their formation in July, 1947, much less apprehension is being displayed by the wives of the pilots concerning their flying.

The families are being included in the Guard activities through a program of annual state Guard dances which provide top-ranking name bands at no expense to the Guardsmen. The pilots have organized an air section party for their wives to be held during summer training camp at Ft. Lewis in June.

\textsuperscript{24}Air Force Regulation No. 60-16.
By these efforts many of the objections to Guard membership based on family objections are being eliminated.

Summary

By means of the procedures outlined in this chapter, considerable progress has been made in organizing and training the light aviation sections of the Oregon National Guard. By continuing the program now in effect, it is believed that the objectives prescribed for the National Guard by the National Guard Bureau will be achieved for the light aviation sections of the Oregon National Guard.
CHAPTER IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The problems investigated in this study were the most significant problems encountered by the author while performing the duties of Light Aviation Advisor to the Oregon National Guard. In the following recapitulation a summary of the major findings and recommendations is presented:

Educational Problems

1. Time Limitations. The achievement of the goals of organization and training set for the National Guard was seriously hindered by lack of sufficient training time because the Guard members devote the greater part of their time to earning a living in their civilian occupation. It was found that this could be mitigated by providing better training aids for classroom instruction and by securing suitable landing facilities near Portland. It is recommended that the above program be continued and expanded as more equipment and facilities become available.

2. Limited Facilities. As a means of overcoming the shortage of hangar space for liaison planes, plans were developed for a new hangar in the vicinity of the Base Motor Pool near the artillery headquarters. Likewise plans have been formulated to provide more adequate landing
fields and landing strip areas by the development of the Camp Adair area. When these two projects are completed, it is probable that the problems of lack of hangar space and lack of training facilities will be eliminated.

3. **Distant and Obscure Objectives.** The handicap of distant and obscure objectives for the National Guard light aviation sections was met by focusing the attention of the members on the more immediate advantages of Guard membership such as drill pay, fraternity, travel, recreational opportunities and the opportunity to attend Army service schools. It is recommended that the above program be continued with greater emphasis being placed upon the Guard activities as an important avocational interest.

4. **Limited Authority of Regular Army Instructors.** Regular Army instructors were able to improve the specific performance of the Guard units by means of making reports through channels to the State Headquarters regarding deficiencies noted in the units concerned. However, it was found that the Army Instructors could help the National Guard units more by providing advice and assistance whenever requested or the need arose. This procedure proved to be the most satisfactory way of accomplishing the objectives of the National Guard.

5. **Lack of Primary Motivation.** Many members of the Guard showed a lack of effort in performing their assigned
duties. This appeared to be due in part to the lack of an immediate threat to their general welfare or safety by anything that might require the use of the National Guard as a military force. A solution was reached by setting up a system of intermediate goals each of which had to be achieved within a specified time. By this method, Guardsmen were required to accomplish one goal at a time and consequently progress toward the prescribed objectives. In the light aviation sections these intermediate goals appear in the form of the National Guard 3-year training program. For the former Air Corps pilots, the requirement is the completion of the prescribed 20-hour flying course within one year from the date they receive their flying orders. Guardsmen who fail to achieve such objectives are now being denied promotions and in extreme cases are being eliminated from the Guard organization.

Economic Problems

1. National Guard Interest Second to Vocational. The duties of the National Guard were found to be secondary to vocational interests and this often resulted in the neglect of Guard duties. This problem was met by putting greater stress upon the many interests of an avocational nature that the Guard offers its members.

It is recommended that the time spent by pilots in
scheduled flight training be allowed to supplant a certain amount of the armory drill time required.

2. **Limitation of State Funds for the National Guard.** The available funds of the State of Oregon for the housing and maintenance of the Guard units were found to be seriously limited. The purpose of the plans submitted to build a new hangar out of salvage materials available at the airbase and the construction of landing strips at Camp Adair with the assistance of the National Guard engineers were for the purpose of reducing the cost of providing for light aviation sections activities born by the State.

3. **Requirements for Drill Pay.** It was found that a pilot was required to spend about six hours per week on his Guard duties. For this he received one day's pay. In addition, he had the opportunities of flying the airplanes, participating in cross-country trips and attending Army service schools.

It is recommended that major emphasis be withdrawn from drill pay and that it be placed upon the other advantages that are available to members of the light aviation sections.

4. **Unavailability of Certain Desirable Persons.** It was found that often very desirable persons were not available for Guard membership because of the demands made on their time by their professions or business activities.
This disadvantage was overcome through a program of acquainting such persons with the many avocational interests the Guard offered. By this method, certain persons otherwise unavailable were brought into the light aviation sections.

It is recommended that constant emphasis be placed upon bringing the highest type of individuals into the light aviation sections.

Sociological Problems

1. Social Classes in the Guard. Social classes were found to exist in the Guard due to a recruiting system whereby old members selected new members from their social groups. This resulted in a social stratification in the light aviation sections. The present sections were found to consist largely of the middle class working group. In order to overcome this disadvantage particular emphasis was placed upon recruiting pilots of the business and professional groups to provide a more representative organization.

2. Selection of Personnel. Much of the selection of the light aviation section men was found to be based upon personal relationships rather than attention to the individual's qualifications. The unit commanders were made to realize that some of their pilots were not the best men available and were often inefficient and dangerous. Thus
the unit commanders were induced to place more emphasis upon the selection of men with higher army efficiency indexes who were better qualified by experience in this type of flying.

3. **Weaknesses in Discipline and Authority.** Enforcement of military discipline was found to be difficult upon members of the Guard because they had friends and relatives in the Guard organization. As military discipline is still considered a necessary element in any military organization, special attention was devoted toward making each member of the light aviation sections aware of the necessity for authority and the responsibilities of command. By this method, progress was made toward unifying the personnel into smooth-working light aviation sections.

4. **Effects of "Influence".** Numerous promotions in the light aviation sections of the Guard were found to have been based upon favoritism and the influence the members were able to bring to bear upon their commanding officers that was unrelated to the performance of Guard duties. This was controlled through setting up standards for promotion that could be met only by qualified men.

5. **Effects on Family Life.** The Guard organization was found to have made no provision for participation of the families of the members in any associated activities such as is present in the American Legion Auxiliary and the
auxiliary groups of other fraternal organizations. This was found to have a negative influence upon the activities of the Guard units. Social activities in which the families may participate such as an annual State Guard dance have been planned.

It is recommended that regular social functions be held for the air section members and their families and that the families be included in an organized week-end activity during each summer training camp.
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No. 50, National Guard Funds, 2 November 1946. 12 pp.

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APPENDIX

1. Armory Drill Training Schedule Light Aviation Sections of the Oregon National Guard, from 1 October to 31 December 1948.

2. Sketch of Proposed Hangar Building for use of light aviation sections.

3. Proposed Landing Strip area at Camp Adair Rifle Range.


7. Summary of Procedures for Practice Flying for Light Aviation Sections, Oregon National Guard.


ITEM NO. 1

TRAINING SCHEDULE
LIGHT AVIATION SECTIONS - OREGON NATIONAL GUARD
1 October - 31 December 1968

Units: 41st Division Arty; 218th FA Bn; 162nd Inf; 186th Inf
Meeting Place: Maintenance Hangar on Flight Line

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<th>PERIOD</th>
<th>SUBJECT</th>
<th>INSTRUCTOR</th>
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<td>Night Navigation</td>
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<td>(Practical Exercise)</td>
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<td>AF Reg 15-41</td>
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<td>Baller</td>
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<td>60 Min</td>
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<td>Ward</td>
<td>TO 01-60 L AA-1</td>
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<td>2 Nov</td>
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<td>Review of AF T/O</td>
<td>Doyle</td>
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* TAS Outline - The Artillery School Air Training Dept. Outline
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<td>Pitt</td>
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NOTES: 1. This training supervised by the Division Artillery Air Officer.

2. Training is for the combined air sections of the units listed.

3. Training is supervised by the Light Aviation Advisor.
ITEM NO. 2

SKETCH OF PROPOSED HANGAR BUILDING FOR
USE OF THE LIGHT AVIATION SECTIONS

Submitted to the Oregon National Guard March 1949.

Location of proposed hangar: Northeast edge of base motor pool area. Planes can be taxied on road to nearest runway.

Materials: Obtainable from salvage 1-story barracks buildings shifted from foundations during June 1948 flood. These buildings can be set on foundations side-by-side and lined-up end-to-end for a total of 320 feet. Openings can be made on one side for doorways for the planes. Doorway spans of 40 feet may be supported by trusses from the damaged officers' club building.

General Plan: Openings for eight planes can be provided from materials available. The maximum aircraft dimensions that must be accommodated in this manner are: wing span 35' 2 9/16"; length 24' and height 8'. (See following page for diagrams of proposed hangar building.)
ITEM NO. 3

PROPOSED LANDING STRIP AREA AT
CAMP ADAIR RIFLE RANGE

[Diagram showing proposed landing strip area at Camp AdaIR Rifle Range]
ITEM NO. 4

RECOMMENDATIONS FOR LIGHT AVIATION PILOT TRAINING

A summary of Recommendations prepared by the Light Aviation Advisor and the Artillery Instructor and submitted to the Senior Instructor in March 1949, for armory drill training of Light Aviation Pilots of the Oregon National Guard:

It is recommended that the Light Aviation Sections be combined for training under the supervision of the Division Artillery Headquarters and that the following subjects be included in their training schedule:

1. Operating Procedures for Liaison Aircraft
   a. L-16
   b. L-17
   c. Capabilities and limitations of Liaison Aircraft

2. Flying Regulations
   a. CAA Regulations
   b. AF Flying Regulations
   c. Procedure on Cross-Country Flights

3. Maintenance of Liaison Aircraft
   a. L-16
   b. L-17
Item No. 4 (continued)

4. Radio Procedure for Liaison Aircraft
   a. Radio Navigation Procedure
   b. Tactical Radio Procedure

5. Liaison Flight Maneuvers
   a. Precision Flight Maneuvers
   b. Short-field landing technique
   c. Maneuvers to qualify ex-AF Pilots

6. Supply and Administration of Light Aviation Sections

7. Tactical Employment of Liaison Aircraft
   a. Selection of Air Strips
   b. Adjustment of Artillery fire
   c. Route and Position Reconnaissance
   d. Special missions

8. Outline of 1949 Summer Training Camp Program
ITEM NO. 5

LIAISON TRAINING FOR EX-AAF PILOTS

In order to qualify ex-A.A.F., pilots as capable light aircraft pilots and qualified (MOS 1981) an extract of light aviation section training guide NGB, is furnished for your information:

(1) **Take-Off and landings.** Normal take-offs, power-off landings, power-off spot landings from 90 degree and 180 degree approaches. Emphasis on control, coordination, and accuracy of landings.

Required time --- 4 hours

(2) **Coordination Exercises.** Rolling from bank to bank with a 90 degree change of direction, and rolling from bank to bank with nose held on a reference point on the horizon. Executed from 500 feet.

Required time --- 3 hours

(3) **Level turns.** Precision turns with varying degrees of bank and change of direction. Careful attention to coordinated entry and recovery, and constant altitude and bank. Executed from 1500 feet.

Required time --- 2 hours

(4) **S Turns.** Executed across a road or other reference lines. Emphasis on constant ground pattern and proper correction for drift. Executed from 500 feet.

Required time --- 2 hours

(5) **Rectangular pattern.** Executed at 500 feet above a pattern on the ground. Emphasis is on true rectangular pattern and proper correction for drift.
Item No. 5 (continued)

(6) **Eights and Pylons.** Executed at 500 feet with emphasis on constant altitude, ground pattern, corrections for drift.

Required time --- 2 hours

(7) **Climbing and Diving Turns.** 720 degree power turns and maximum performance climbs completed above 1500 feet.

(8) **Slips.** Not practiced in airplanes equipped with flaps (L-5) (L-17).

(9) **Two-turn Power-off Spins.** Completed above 1500 feet. Executed to the right and left, with emphasis on stoppage on a selected point and recovering without gaining excessive speed. Spins are not executed in L-5 or L-17A.

Required time --- 2 hours

Special flight maneuvers with a minimum time of five hours to include the special flight maneuvers listed below will be included in the course for Ex-Army Air Forces pilots:

(1) Take-Offs and landings to panels.
(2) Take-Offs and landings to barriers. (To be over simulated obstructions).
(3) Take-Offs and landings on roads.
(4) Crosswind landings and take-offs.
(5) One-Wheel landings and take-offs.
(6) Contour flying. (when specifically authorized and in specified areas only).
(7) Landings from contour approaches.
(8) Evasive maneuvers.

(Quoted from N.G.B. Light Aviation Section Training Guide).
ITEM NO. 6

SUMMARY OF REPORT OF TECHNICAL INSPECTION
OF LIAISON PLANES PERFORMED BY
LIGHT AVIATION ADVISOR

28 May 1948

The monthly Technical Inspection of Liaison planes was made this date and the following deficiencies noted:

#47-912 218th FA Bn

#47-1271 218th FA Bn
Wings and fuselage markings not complete. Data Case incomplete (No T/Os available). First Aid Kit missing. Engine instruments do not have range markings. No slippage marks on glass.

#47-913 186th Inf
Slow leak on fuel tank fuel return connection. Wings and fuselage markings incomplete. No range markings or glass slippage marks on engine instruments. Chafed plexiglass on left window. Data case incomplete (no T/Os available). First Aid Kit and fire extinguisher not installed.

#47-916 162nd Inf
Data Case incomplete (No T/Os available). Corrosion beginning on prop hub. Engine instruments range markings incomplete. No slippage marks on glass. Wings and fuselage markings incomplete.
ITEM NO. 7

SUMMARY OF PROCEDURES FOR PRACTICE FLYING
FOR LIGHT AVIATION SECTIONS
OREGON NATIONAL GUARD

6 January 1948

SOP FOR STAGE "B" *

PRACTICE FLYING
LIAISON AIR SECTIONS, ORNG

I. GENERAL:

A. Local Flying Area

1. Local Flying Area as set up by State Air Officer extends PAAB - Troutdale - Eugene - Corvallis - Forest Grove - PAAB.

2. Obtain local clearance from Operations Office by signing local clearance and calling tower by inter-com for takeoff instructions. Obtain weather from station across the field. Be sure to sign in on return.

II. PRACTICE AREAS:

1. At present, two practice areas are available; Camp Withycombe and Camp Adair.

2. CAMP WITHYCOMBE

a. 13 miles SE PAAB at Clackamas.

b. Consists of training field with barriers and panels. Please lower one pole of each barrier on completion of practice.

3. CAMP ADAIR

a. 65 miles SW PAAB on Highway 99W, near Corvallis.

* SOP - Standard Operating Procedure
Item No. 7 (continued)

b. Consists of two (2) training areas; Camp Adair proper and Rifle Range #4, 3 miles NW of Adair.

c. Camp Adair proper contains 10 street areas suitable for practice landings.

d. Rifle Range #4, consists of an area of approximately 600 acres, located 3 miles NW of Camp Adair proper and contains 8 road and field strips.

e. Planes may be refueled at strip #1 by contacting the Caretaker. Sign his issue slip for amount of fuel obtained.

FOR THE SENIOR ARMY INSTRUCTOR:

MELVIN C. MONROE  
Captain, F.A.,  
Light Aviation Advisor
ITEM NO. 8

STANDARD OPERATING PROCEDURE FOR
LIGHT AVIATION SECTIONS
SUMMER TRAINING CAMP 15-29 JUNE 1948

I. General

This outlines the procedures to be followed by
the air sections of the 41st Infantry Division, at
Camp Clatsop, Oregon, during the field training
period 15-29 June 1948.

II. Units:

162nd Infantry 965th FA Bn
186th Infantry Hq Btry Division Artillery
218th FA Bn

III. Flying Field

a. All aircraft of the 41st Infantry Division, ONG,
will be based at Camp Clatsop. The northwest end of
the parade ground will be used as a landing field.
Planes will be tied-down on a line paralleling the
west side of the strip and against the western sand
ridge.

b. Traffic -- Left hand traffic pattern. Traffic
altitude - 500 feet.

DANGER: Whenever the rifle range is being used
as indicated by the red range flag, traffic patterns
will not extend south of Airport Road.

c. Operations tent

An operations tent will be maintained in the
vicinity of the tie-down area. Telephone communica-
tions will be established with the camp switchboard.
A 1/4 ton truck will be available for hauling
passengers to and from the camp area.

An air section member will be on hand at all times
to service aircraft, schedule flights and guard the
aircraft and equipment.
Item No. 8 (continued)

IV. Duties of Personnel

a. Air Officer
   1) Technical advisor on employment of air section.
   2) Coordinate all matters pertaining to air section.
   3) Coordinate obtaining and distributing supplies.
   4) Supervise selection of airfields.
   5) Supervise operation and functioning of the field.
   6) Checks on maintenance and keeping of records.
   7) Coordination of radio channels.
   8) Briefing, questioning and forwarding of information when on tactical problems.

b. Operations Officer (Engr. supply, Asst A-O)
   1) Inspection of forms and records.
   2) Supervision of Technical inspection.
   3) Maintains operations tent and situation map.
   4) Coordination of radio frequencies.
   5) Secures info on where VT fuses are to be used.
   6) Supply of parts.
   7) Assisted by pilot and T/Sgt.

c. Air Mechanic
   1) Supervise maintenance, inspection and records.
   2) Supervise mechanics and other E.M. if pooled.
   3) Section supplies.

d. Junior Air Mechanic
   1) Assists senior mechanic.
   2) Drives vehicle.
   3) Aids in administrative details.
   4) Lays out panels on pre-arranged signal.
   5) Meets the planes and guides them to gas pit.
   6) Gas and park aircraft.

e. General
   1) One mechanic will remain on duty at the airfield at all times.
   2) He will receive incoming phone calls, schedule flight requests and keep pilots informed of the same.
V. Refueling

Aviation gasoline and lubricating oil obtained from unit motor pool.

VI. Operations

a. Clearances

1) Local Flights in the vicinity of the Camp Clatsop training area or in connection with a motor movement are considered local and will be made on only a local clearance.

2) X-C All flights outside the local area must be supported by written orders of the unit and cleared thru Army Flight Service by calling Tacoma LD 20, Collect. When the FS officer answers, begin by: "I have a flight plan", and then read off the information given on Section D (Flight plan) of Form 23.

On arrival at destination, close flight plan at nearest AACS office if available on the field or again call AFS and give: "I have an arrival," and read off Section D and give time on the ground.

CAUTION: Failure to close flight plan might cause search missions to be initiated and bring serious disciplinary action upon the pilot.

b. Weather

1) Weather information for local flights may be obtained by calling West Coast Airlines office at the Astoria airport.

2) When storm warnings warrant emergency action, aircraft will be placed in the hangar at the Astoria airport after having made arrangements with the airport manager. Hangar space must be paid for through the United States Property and Disbursing Officer.
Item No. 8 (continued)

VII. Training

Fields

Practice landings may be made on the 41st Division airfield, the Astoria airport and such other fields as may be designated.

Air-Ground Radio practice

Flights during which air-ground radio communication will be used. A communication check will be made whenever practical before taking off in order to insure proper functioning of the radios during the exercise.

BY COMMAND OF BRIGADIER GENERAL MAISON
ITEM NO. 9

AIR SECTION TRAINING SCHEDULE

Camp Clatsop, Oregon  15-29 June 1948

Units:  
186th Inf  965th FA Bn
162nd Inf  Hq 41st Div Arty
218th FA Bn

* Observer Training included during this period.

**Tues 15 June**  -- Movement to Camp Clatsop  
Laying out the Airfield and Preparation of Airstrip  
1-Hr Standard Precision Flight Maneuvers

**Wed 16 June**  -- 0715-0730 Briefing of Pilots and Preflight of Aircraft  
0730-0830 Standard Flight Maneuvers  
0830-0930 Power-off Spot Landings  
* 0930-1030 Observer Training  
1030-1130 E-6B Computer and Preparation of X-C Log  
1300-1400 Standard Precision Flight Maneuvers

**Thurs 17 June**  -- 0715-0730 Briefing and Preflight  
0730-0830 Standard Precision Flight Maneuvers  
0830-0930 Power-Off Spot Landings  
* 0930-1030 Observer Training  
* 1030-1130 Air-Ground Radio Procedure  
1300-1400 Power Approach Landings

**Fri 18 June**  -- 0715-0730 Briefing and Preflight  
0730-0830 Power Approach Landings  
0830-0930 Road Landings  
* 0930-1030 Observer Training  
1030-1130 Review of Plan 62 (X-C Clearances)  
1300-1400 Power Approach Landings over barrier

**Sat 19 June**  -- 0715-0730 Pilot Briefing and Preflight  
0730-0830 Power Approach Landings over barrier  
Item No. 9 (continued)

Mon & Tues 21, 22 June - 0500-- 2-Day X-c including 200 mile low level. Clatsop-PAB-Redmond-Lakeview-Klamath Falls (RON)-Medford-Corvallis-Newport-Clatsop

Wed 23 June -- 0715-0730 Briefing and Preflight
0730-0830 Power Approach Landings Over Barriers
0830-0930 Selection of Landing Fields, Simulated Landings
* 0930-1030 Observer Training
* 1030-1130 Review of Artillery Adjustment
1300-1400 Simulated Artillery Adjustment

Thurs 24 June -- 0715-0730 Briefing and Preflight
0730-0830 Short Field Landings
* 0830-0930 Route and Position Reconnaissance
* 0930-1030 Observer Training
* 1030-1130 Review Surveillance of Enemy Area
* 1300-1400 Surveillance of Enemy Area

Fri 25 June -- 0715-0730 Briefing and Preflight
0730-0830 Short Field Landings
* 0830-0930 Simulated Artillery and Mortar Fire Adjustment
* 0930-1030 Observer Training
* 1030-1130 Review Infantry and Artillery Tactics
1300-1400 Tactical Problem with Infantry

Sat 26 June -- 0715-0730 Briefing and Preflight
0730-0830 Short Field and Road Landings
* 0830-0930 Observer Training
0930-1030 Inspection of Aircraft, Forms, Records and Equipment

Mon 28 June -- 0715-0730 Briefing and Preflight
0730-0830 Short Field Landings
0830-0930 Artillery Service Practice or Observer Training

 Tues 29 June ---------- Return to Home Station