

CENTRAL INTELLIGENCE AGENCY
INFORMATION REPORT



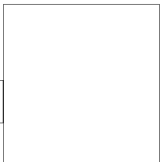
COUNTRY USSR

DATE DISTR *16 Feb* 1953
50X1

SUBJECT Estimate of the T/O and E of Training Institutes in the Soviet Air Force

NO. OF PAGES *35*
G-2 Tech Br.

PLACE ACQUIRED



NO. OF ENCLS.
(LISTED BELOW)
AMS - ESID (TIB)
SUPPLEMENT TO REPORT NO.

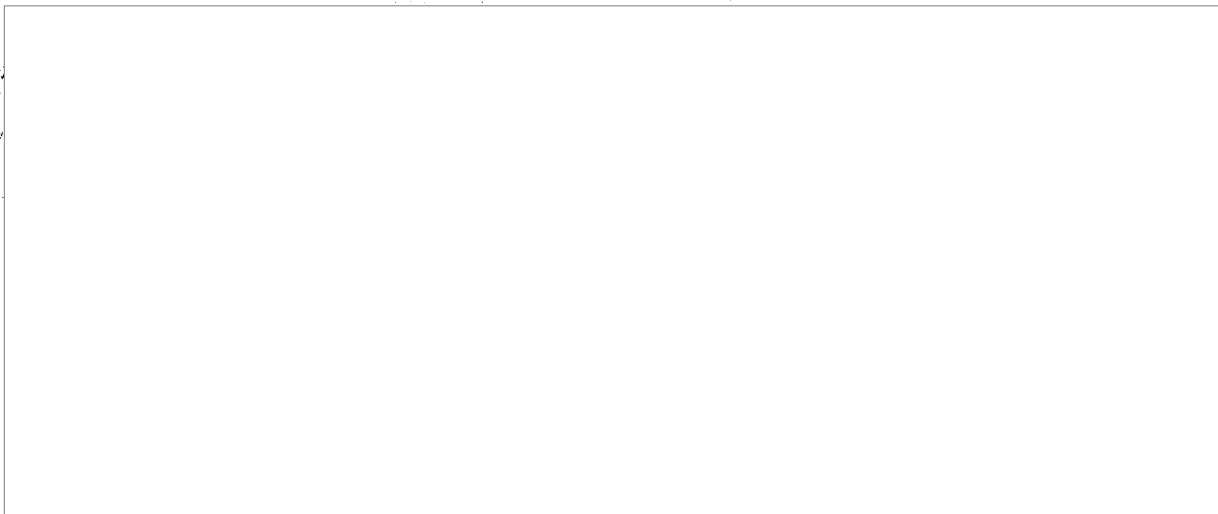
DATE ACQUIRED

DATE OF INFORMATION

50X1

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES, WITHIN THE MEANING OF TITLE 18, SECTIONS 793 AND 794, OF THE U.S. CODE, AS AMENDED. ITS TRANSMISSION OR REVELATION OF ITS CONTENTS TO OR RECEIPT BY AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. THE REPRODUCTION OF THIS FORM IS PROHIBITED.

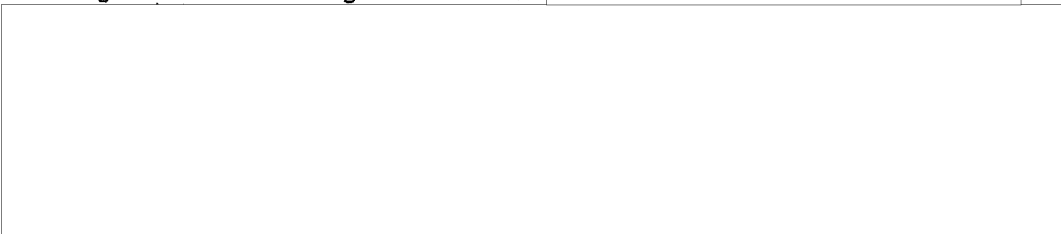
THIS IS UNEVALUATED INFORMATION



1. This report represents my estimates of the T/O and E of the following types of training institutes within the Soviet Air Force.

- (a) Military Air Institute for Fighter Pilots.
- (b) Military Air Institute for Technical Officers
- (c) Military Air Institute for Bomber Pilots (Tactical).
- (d) Military Air Institute for Navigators (Tactical).
- (e) Military Air Institute for Navigators (Long Range).
- (f) Military Air School for Aviation Mechanics. 50X1
- (g) Military Air School for Radio Operator/Gunner
- (h) Military Air Institute for Pilots (Long Range). 50X1
- (i) DOSAAF Aero Club.

2. The T/O of flight institutes has undergone changes since the Great Patriotic War (World War II). Three training air regiments (Uchenbniye Aviatsionniye Polki) were organized in each flight institute.



CLASSIFICATION		SECRET/SECURITY INFORMATION																	
<i>State</i>	<input checked="" type="checkbox"/>	<i>Navy</i>	<input checked="" type="checkbox"/>	<i>Air</i>	<input checked="" type="checkbox"/>	DISTRIBUTION													
<i>Army</i>	<input checked="" type="checkbox"/>	<i>AW</i>	<input checked="" type="checkbox"/>	<i>FB</i>	<input checked="" type="checkbox"/>														

- 2 -

50X1
50X1

pilots. Most of these were flying solo on combat-type aircraft or were being trained to graduate on combat-type aircraft, but received one or two poor grades in a few subjects and were consequently expelled from the institute. After they were expelled, the above individuals were assigned for further service to the GSOVG (Group of Soviet Occupation Forces in Germany) as junior air specialists (assistant aircraft mechanics, assistant armaments mechanics, etc). On the basis of the above factors, the approximate T/O of these schools as of 1949.

Permanent Personnel T/O of a Pilots' Air Institute (Fighter)

No	Duty Designation	Military Grade	No of pers
1.	Chief of the Institute	Maj Gen of Aviation	1
2.	Adjutant to the Chief of the Institute	Sr Lt, Capt	1
3.	Institute Chief of Staff	Maj Gen of Aviation	1
4.	Institute Chief of the Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen of Army, Col or Maj Gen of Aviation	1
5.	Institute Main Engineer, simultaneously the Deputy Chief of the Institute for Engineering-Aviation Service	Maj Gen of Engineering-Aviation Service or Engineer Colonel	1
6.	Institute Deputy Chief for the Rear	Col of the Quartermaster Service	1
7.	Chief of the Institute's Medical Service	Col of the Medical Service	1
8.	Deputy Chief of the Institute for Drill Matters	Lt Col, Col	1
9.	Institute Main Navigator	Col	1
10.	Institute Chief of the Officer Personnel Section	Lt Col, Col	1
11.	Chief of the Flight-Training Section of the Institute, simultaneously the Institute's Deputy Chief of Staff	Col	1
12.	Chief of the MGB Counter-Intelligence Section	Lt Col, Col	1
13.	Chief of the Institute Communications	Lt Col	1
14.	Chief of the E M Personnel Section	Capt, Maj	1
15.	Chief of the Finance Section	Capt, Maj	1
16.	Main bookkeeper of the Finance Section, simultaneously the Deputy Chief of the Finance Section	Capt, Maj	1
17.	Chief of the Food Section	Maj, Lt Col	1
18.	Deputy Chief of the Food Section, simultaneously the Chief of the Food Storehouse	Capt, Maj	1
19.	Chief of Clothing and Equipment Supply	Maj, Lt Col	1
20.	Deputy Chief of Clothing and Equipment Supply, simultaneously the Chief of the Clothing and Equipment Storehouse	Capt, Maj	1
21.	Petroleum, Oil and Lubricants Chief	Capt of the Air Technical Service	1
22.	Institute Chief of the Technical Section	Capt, Maj of the Air Technical Service	1
23.	Institute Chief of Combat Supplies (Boypitaniya)	Capt, Maj of the Air Technical Service	1
24.	Motor Vehicle Company Commander	Capt, Maj	1
25.	Assistant Company Commander for Technical Matters	Senior Technical Lt Engineer Capt	1
26.	Motor Vehicle Platoon Commander	Lt, Senior Lt	3
27.	Institute Chief of the Secret Section	Senior Lt, Capt	1
28.	Assistant Chief of the Officer Personnel Section	Capt, Maj,	1
29.	Assistant Chief of the E M Personnel Section	Senior Lt Capt	1
30.	Chief of the Bombing Range	Lt, Senior Lt	1
31.	Chief of the 6th Section (Cypher)	Capt, Maj	1
32.	Assistant Chief of the 6th Section (Cypher)	Senior Lt, Capt	1
33.	Chief of the Meteorological Station	Engineer Capt	1
34.	Senior Meteorologist	Engineer Maj	1
35.	MGB Counter-Intelligence Section Investigator	Senior Technical Lt Engineer Capt	1
36.	MGB Counter-Intelligence Section Chief-Clerk (This slot may be held by an officer or a civilian)	Junior Lt through Maj incl	3
		Junior Lt, Lt	1

SECRET/SECURITY INFORMATION

37.	Chief of the Tactics Cycle, simultaneously the Deputy Chief of the Flight-Training Section of the Institute	Lt Col, Col,	1
38.	Senior Tactics Instructor	Capt, Maj or Lt Col	3
39.	Tactics Instructor	Capt, Maj	3
40.	Senior Bombing Training Instructor	Maj, Lt Col	2
41.	Bombing Training Instructor	Capt, Maj	1
42.	Senior Navigators' Training Instructor	Maj, Lt Col	2
43.	Navigators' Training Instructor	Capt, Maj	1
44.	Senior Communications Training Instructor	Maj, Lt Col	1
45.	Navigators' Training Instructor	/sig/	1
46.	Chief of the Technical Training Cycle	Engineer Lt Col, Engineer Col	1
47.	Senior Technical Training Instructor	/sig/	1
48.	Technical Training Instructor	Engineer Capt Engineer Maj	1
49.	Senior Aerodynamic Instructor	Engineer Maj Engineer Lt Col	2
50.	Aerodynamics Instructor	Engineer Capt Engineer Maj	1
51.	Senior Meteorological Training Instructor	Engineer Capt Engineer Maj	1
52.	Meteorological Training Instructor	Senior Technical Lt, /sig/ Engineer Capt	1
53.	Senior Chemical Training Instructor	Maj, Lt Col	1
54.	Chemical Training Instructor	Capt, Maj	1
55.	Senior Aerial Gunnery Training Instructor	Engineer Maj, Engineer Lt Col	1
56.	Aerial-Gunnery Training Instructor	Engineer Capt, Engineer Maj	1

(In all cases where a military grade is prefixed by "Engineer", the officer may be an officer of the Air Technical Service. A T S

57.	Senior Physical Training and Sports Instructor	Maj	1
58.	Physical Training and Sports Instructor	Capt, Maj	1
59.	Senior Military Topography Instructor	Capt, Maj	1
60.	Military Topography Instructor	Senior Lt, Capt	1
61.	Deputy Chief of the Institute's Political Section	Maj, Lt Col	1
62.	Political Section Instructor for Propa- ganda and Agitation	Senior Lt through Lt Col Incl	1
63.	Senior Political Section Instructor for Propaganda and Agitation	Maj, Lt Col	1
64.	Political Section Instructor for Party Records	Senior Lt Capt Maj	1
65.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt	1
66.	Chief of the Residence Maintenance Section	Capt, Maj	1
67.	Chief of the Dispensary	Maj, Lt Col of the Medical Service	1
68.	Therapeutic Physician	Capt, Maj or the Medical Service	1
69.	Ear, Nose and Throat Physician	Capt, Maj of the Medical Service	1
70.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
71.	Institute Engineer for Armaments	Engineer Maj, Engineer Lt Col	1
72.	Institute Engineer for Special Equipment	Engineer Maj, Engineer Lt Col	1
73.	Commander of the Air Training Regiment	Col	2
74.	Chief of Staff of the Air Training Regiment	Lt Col, Col	2
75.	Deputy Commander of the Air Training Regiment for Political Matters	Lt Col, Col	2
76.	Senior Air Training Regiment	Engineer Maj, Engineer Lt Col	2
77.	Engineer of the Air Training Regiment for Special Equipment	Engineer Capt, Engineer Maj	2
78.	Engineer of the Air Training Regiment for Armaments	Engineer Capt, Engineer Maj	2
79.	Deputy Chief of Staff of the Air Training Regiment	Capt, Maj	2

80.	Chief of Communications of the Air Training Regiment	Capt, Maj	2
81.	Chief of the E M and Officer Personnel Section of the Air Training Regiment	Senior Lt, Capt	2
82.	Chief of the Secret Section of the Air Training Regiment	Senior Lt, Lt	2
83.	Chief of the Chemical Service of the Air Training Regiment	Lt through Maj Incl	2
84.	Squadron Commanders	Senior Lt through Lt Col Incl	8
85.	Deputy Air Squadron Commander for Drill Matters	Senior Lt through Maj Incl	8
86.	Adjutant (or Chief of Staff) of the Squadron	Senior Lt through Maj Incl	8
87.	Squadron Engineer (or Squadron Senior Technician)	Technical Lt through Engineer Maj Incl	8
88.	Air Squadron Senior Technician for Armaments (Air Squadron Technician for Armaments)	Senior Technical Lt Engineer Capt	8
89.	Air Squadron Senior Technician for Special Equipment (or Air Squadron Technician for Special Equipment)	Senior Technical Lt Engineer Capt	8
90.	Flight Technician	Technical Lt, Senior Technical Lt	8
91.	Flight Commander	Senior Lt, Capt	8
92.	Pilot - Instructor	Lt, Senior Lt	16
93.	Chief of the Club	Capt	1
94.	Chief of the Library	Lt, Senior Lt	1
95.	Political Section Agitator	Capt, Maj	1
96.	Training Battalion Commander	Maj, Lt Col	1
97.	Training Company Commander	Senior Lt, Capt	2
98.	Battalion Senior Adjutant	Capt, Maj	1
99.	Training Platoon Commander	Lt, Senior Lt	4
100.	Communications Platoon Commander	Lt, Senior Lt	1

T/O Officer Total 198

Enlisted Personnel

1.	Aircraft Mechanic	Master Sgt	64
2.	Armaments Mechanic	Master Sgt	8
3.	Radio Mechanic	Master Sgt	8
4.	Instrument Mechanic	Master Sgt	8
5.	Electrical Equipment Mechanic	Master Sgt	8
6.	Assistant Aircraft Mechanic	Sgt, Senior Sgt	-
7.	Assistant Armaments Mechanic	Sgt	8
8.	Assistant Electrical Equipment Mechanic	Sgt	8
9.	Assistant Radio Mechanic	Sgt, Senior Sgt	8
10.	Assistant Electrical Equipment Mechanic	Sgt, Senior Sgt	8
11.	Motion Picture Mechanic	Sgt, Senior Sgt	-
12.	Headquarters Clerks and other Headquarters and Supply Service Duty Designations	Sgt, Senior Sgt	4-6
13.	Drivers, Auto-Mechanics and other Specialists of the Motor Vehicle Company	Pvts, Sgts	50
14.	Various Type Specialists of the Communications Platoon	Pvt through Senior Sgt	20

T/O Enlisted Total (Approximate) 204

Civilian Personnel

No	Duty Designation	No of Pers
1.	Nurse	4
2.	Cook	10
3.	Stoker (Kachegari)	3
4.	Electrician	1
5.	Typist	6
6.	Dishwasher	4
7.	Storekeeper (Kladovshehiki)	4
8.	Medical Aid (Sanitarki)	3
9.	Telephone Operator	3
10.	Telegraph Operator	3
11.	Carpenter	2
12.	Locksmith (Slesar)	2
13.	Porter	4
14.	Waitress	4
15.	Accountant	6
16.	Bookkeeper	2
17.	Librarian	2
18.	Laboratory Technician	1
19.	Dining Hall Supervisor	2

T/O Civilian Personnel Total (Approximate)

66

3. The permanent personnel T/O given above refers only to a Military Air Institute for fighter pilots. Two training air regiments and one training battalion were used as a basis for working out the T/O. The institute's training battalion is actually the freshman course. The battalion is composed of two training companies, the training companies of two training platoons, and the platoons of two squads.
4. All new students entering the institute are assigned to this battalion and here they remain for one year. Basically, their studies during this year consist of general military training and theoretical studies in other subjects. All of the officer-instructors in this battalion lack air force training; instead, they are all graduates of an infantry institute. However, since they are in the Military Air Forces they wear air force uniforms.
5. After having served in this battalion for one year, all the students are transferred to the first training air regiment. New students are then assigned to the training battalion.
6. After serving in the first training air regiment for one year, the students are transferred to the second one where they complete their period of training in the given air institute for fighter pilots.

7. Both of the training air regiments consist of four squadrons each of which is composed of two flights. Thus, all of the T/O data was based on such an arrangement. In addition to the above information regarding the transfer of students from the first to the second training air regiments, another variant (in which students transferred from a battalion to a regiment remain in the regiment until graduation) is possible. Each training air regiment has 32 aircraft, each squadron has eight, and each flight has four. Thus, each regiment is equipped with sixteen combat fighters. I do not know the exact type but assume that the aircraft are probably of the "YAK", "LA", or "MIG" type. At the present time, they are probably MIG-15's. In addition, the regiment has eight primary-trainers and eight combat trainers. Each squadron has four combat aircraft, two primary-trainers, and two combat trainers. In this manner, one of the squadron's flights has combat aircraft only, while the second flight has primary and combat trainers only.
8. Under the T/O for enlisted personnel I have made no provision for assistant aircraft mechanics since this duty is performed by students in the school. This enables the student to have a better comprehension of the technical aspects of the aircraft which he will later operate.
9. I have shown the duty designations of civilian personnel who are included in the institute's T/O and who receive their pay in the institute's finance section. There are other civilians working in the institute (in addition to the ones mentioned above) who receive their pay from the military exchange. For this reason the civilian personnel of the military exchange who serve in the institute's stores, officers' dining halls, the tailor and shoe repairing shops, the laundry, and the barber shop are not included in the T/O given above.
10. I can not guarantee the exactness of the strength picture given above since it could have increased or decreased since 1946. However, the above T/O is approximately correct.
11. In accordance with the above permanent personnel T/O of an air institute, there will be about 300 students in this institute. Each training group will have from 24 to not more than 30 individuals. To summarize the above data, the air institute will have

198 permanent officer personnel
 204 permanent enlisted personnel
 66 civilian personnel
 300 students

768 Total

If the civilian personnel are not taken into account, there will be 702 personnel in the institute.

12. The following equipment is found in each Fighter Air Institute:
1. Link Trainer
 2. Aircraft engines mounted on fighter aircraft
 3. A cabin (whose designation I cannot remember) which is used for visual orientation training.
 4. A cabin (whose designation I cannot remember) in which a radio-compass and all the instruments necessary to insure the operation of a radio-compass are installed.
 5. Turrets in which the guns and sights used on fighter aircraft are mounted.
 6. Cabins with sighting mechanisms and guns
 7. The fuselage of the fighter aircraft which the students will later fly.
 8. Charts showing the aerodynamic qualities of the aircraft
 9. Charts showing various aerobic exercises.
 10. Charts showing the distance at which a target will be seen through the sight and how it will look.
 11. Instrument panel and all of the instruments on it.
 12. Tripods with sighting mechanisms.
 13. Charts showing various stages of aerial combat.
 14. Charts showing take-offs and landings.
 15. Charts showing the organization of foreign air forces.
 16. Charts showing the organization of the Military Air Force of the Soviet Army.
 17. A gunnery range with the following equipment:
 - (a) Movable targets
 - (b) Stationary targets
 - (c) Cabins with combat arms and sights.
 - (d) Tripods with sights and model guns mounted on them used for training purposes in laying and using guns.
 - (e) Turrets
 18. The secret library which contains the following literature:
 - (a) Colonel Envald's books - "The Theory of Aerial Gunnery".
 - (b) Books (by an author whose name I cannot recall) - "Bombing Training"
 - (c) Manual dealing with the execution of flights.
 - (d) Instructions on the operation of various type aircraft in the air.
 - (e) Regulations dealing with Navigators' Training

SECRET/SECURITY INFORMATION

- 7 -

- (f). Regulations dealing with the combat application of fighter aviation.
 - (g). Regulations dealing with the combat application of reconnaissance aviation.
 - (h). Regulations dealing with the combat application of ground-attack aviation.
 - (i). Regulations dealing with the combat application of transport aviation.
 - (j). Field Manual for the Armed Forces.
 - (k). Unit internal subordination regulations (USTAV vnutrennei sluzhbi) of the Armed Forces of the USSR.
 - (l). Gunnery Manual.
 - (m). Disciplinary Service (Punishments) regulations (USTAV Distsiplinarnoi Sluzhbi) of the Armed Forces of the USSR.
 - (n). Aviation Combat Manual.
 - (o). Books (by an author whose name I cannot remember) on "Aircraft Engines".
 - (p). Engineer Shulzhenko's books on "Aircraft Construction".
 - (q). High-Altitude Training Manuals.
 - (r). Garrison Service Regulations of the People's Commissar of Defense of the USSR.
 - (s). Manuals dealing with the field service of headquarters.
 - (t). Informational handbooks for the study and generalization of the Great Patriotic War's experiences.
 - (u). Informational handbooks published by the Voroshilov Military Academy of the General Staff dealing with the combat operations of various type troops.
 - (v). Communications Service Manual.
 - (w). Intelligence bulletins pertaining to foreign troops.
 - (z). Various types of books which must be used by the students in their studies (I do not remember the titles of these other books).
 - (y). VVA - Physical Training and Sports Program (10)
 - (z). Books dealing with Military Topography by an author whose name I do not recall (10-25).
 - (aa). Books dealing with Military Aerodynamics by an author whose name I cannot recall (30-40)
 - (bb). Books dealing with Aerodynamics at High Speeds by an author whose name I cannot recall (20-30)
19. A chart showing a sectional view of a gas mask (a crash helmet with a corrugated nose and a canister).
 20. A picture-poster illustrating various anti-chemical defensive means such as: anti-gas, socks, gloves, capes, cape-raincoats, and individual first-aid packages.
 21. Sectional cuts of the models of various aerial bombs (including chemical bombs).
 22. Sectional cuts of the models of various aerial shells and cartridges.
 23. Sectional-cuts of models of various aerial detonators.
 24. Aircraft cannons and machine guns mounted on stands (Priamós) in the classes.
 25. Charts showing the ballistical characteristics of aerial bombs.
 26. Charts showing different elements involved in navigational computations.
 27. Parallel bars
 28. Climbing ropes.
 29. Rings
 30. Bar-weights
 31. Grenades
 32. Ladders
 33. Reinskoye Wheel
 34. Centrifuge
 35. Other equipment used in physical training and sports.
 36. Rifle and bayonet
 37. Gas mask
 38. Cartridge pouch
 39. Charts giving the topographical marks of localities
 40. Charts posters showing the correct way to plot a course on a map.
 41. A chart showing the defensive organization of an infantry squad, platoon, company and battalion.
 42. Boards on which are fastened various aircraft engine components.
 43. Charts showing methods of oiling various aircraft engines which are installed on fighter aircraft of different construction.
 44. A bombing range with models of aircraft and motor vehicles on it.
 45. Wind tunnel
 46. A board with sectional cuts of the oxygen equipment on a fighter aircraft including:
 - (a) An oxygen mask
 - (b) The oxygen cylinder
 - (c) Automatic oxygen flow regulator (Kommandnyi Pribor).
 47. Fighter Aircraft models
 48. In addition, there are a number of other charts and models whose designation I cannot remember. All of the above equipment refers to air institutes for fighter and ground-attack pilots since both of these institutes are approximately the same.
13. The permanent officer and enlisted personnel T/O of a Military Air Technical Institute is considerably smaller than in a Fighter Air Institute. Furthermore, the equipment in the training section of a Military Air Technical Institute will differ from that of an Air Institute for Pilots since there are many more subjects dealing with technical training in a technical institute than in an institute for fighter pilots. The T/O of an Air Technical Institute is given below in its approximate form:

SECRET/SECURITY INFORMATION

No.	Duty Designation	Military Grade	No. of Pers.
1.	Institute Chief	Maj Gen or Lt Gen of the Engineer-Aviation Service	1
2.	Adjutant to the Institute Chief	Senior Lt, Capt	1
3.	Institute Chief of Staff	Maj Gen of the Engineer-Aviation Service	1
4.	Institute Chief of the Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen, Col or Maj Gen of Aviation	1
5.	Institute Chief of the Medical Service	Col of the Medical Service	1
6.	Deputy Chief of the Institute for Drill Matters	Col, Lt Col	1
7.	Chief of the Officer Personnel Section	Lt Col	1
8.	Chief of the Institute's Training Section, simultaneously the Institute's Deputy Chief of Staff	Col	1
9.	Deputy Chief of the Officer Personnel Section	Capt, Maj	1
10.	Institute Deputy Chief for the Rear	Col, Col of the Quartermaster Service	1
11.	Chief of the Dispensary	Maj, Lt Col of the Medical Service	1
12.	Institute Chief of Communications	Lt Col	1
13.	Institute Chief of the E M Personnel Section	Capt, Maj of the Administrative Service	1
14.	Chief of the MGB Counter-Intelligence	Lt, Col, Col	1
15.	Institute Chief of the Finance Section	Capt, Maj of the Administrative Service	1
16.	Chief Bookkeeper of the Finance Section, simultaneously the Deputy Chief of the Finance Section	Capt, Maj of the Administrative Service	1
17.	Chief of the Food Section	Maj, Lt Col of the Administrative Service	1
18.	Assistant Chief of the Food Section, simultaneously the Chief of the Food Storeroom	Capt, Maj of the Quartermaster Service	1
19.	MGB Counter-Intelligence Investigator	Lt through Maj Incl	2
20.	MGB Counter-Intelligence Section Chief Clerk	Lt, Senior Lt	1
21.	Chief of the Clothing and Equipment Section	Maj, Lt Col of the Quartermaster Service	1
22.	Assistant Chief of the Clothing and Equipment Section	Capt of the Quartermaster Service	1
23.	Petroleum, Oil and Lubricants Chief	Senior Technical Lt, Capt of the Air Technical Service	1
23A.	Commander of the Motor Vehicle Company	Capt, Maj	1
24.	Assistant Commander of the Motor Vehicle Company for Technical Matters	Senior Technical Lt, Engineer Capt	1
25.	Motor Vehicle Platoon Commander	Lt, Senior Lt	1
26.	Assistant Chief of the E M Personnel Section	Lt, Senior Lt	1
27.	Institute Chief of the Secret Section	Senior Lt, Capt of the Administrative Service	1
28.	Chief of the 6th Section (Cypher Section)	Capt, Maj	1
29.	Assistant Chief of the 6th Section	Senior Lt, Capt	1
30.	1st Battalion Commander	Maj, Lt Col	1
31.	2nd Battalion Commander	Maj, Lt Col	1
32.	3rd Battalion Commander	Maj, Lt Col	1
33.	Company Commander	Capt, Maj	6
34.	Platoon Commander	Lt, Senior Lt	12
35.	Deputy Commander of the Battalion for Political Matters	Maj, Lt Col	13
36.	Deputy Chief of the Institute's Political Section	Maj, Lt Col	1
37.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt,	1
38.	Senior Instructor of the Political Section for Propaganda and Agitation	Maj, Lt Col	1
39.	Instructor of the Political Section for Propaganda and Agitation	Capt, Maj	1
40.	Instructor of the Political Section for Party Records	Senior Lt, Capt	1

No	Duty Designation	Military Grade	No of Pers
41.	Agitator of the Political Section of the Institute	Capt, Maj	1
42.	Chief of the Residence Maintenance Section of the Institute	Capt, Maj	1
43.	Chief of the Institute's Club	Capt	1
44.	Chief of the Institute's Library	Lt, Senior Lt	1
45.	Deputy Chief of the Training Section	Maj, Lt Col	1
46.	Commander of the Communications Platoon	Lt, Senior Lt	1
47.	Therapeutic Physician	Capt, Maj of the Medical Service	1
48.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
49.	Assistant Chief of the Residence Maintenance Section of the Institute	Lt, Senior Lt	1
50.	Senior Instructor of Physical Training and Sports	Capt, Maj	1
51.	Instructor of Physical Training and Sports	Senior Lt, Capt	1
52.	Senior Instructor of Tactical Training	Maj, Lt Col	1
53.	Instructor of Tactical Training	Capt, Maj	2
54.	Senior Instructor of Chemical Training	Maj, Lt Col	1
55.	Instructor of Chemical Training	Capt, Maj	1
56.	Senior Instructor of Military Topography	Capt, Maj	1
57.	Instructor of Military Topography	Capt	1
58.	Senior Communications Instructor	Maj, Lt Col	1
59.	Communications Instructor	Capt, Maj	1
60.	Senior Aerodynamics Instructor	Maj, Lt Col	1
61.	Aerodynamics Instructor	Capt, Maj	2
62.	Senior Special Equipment Instructor	Engineer Capt, Engineer Maj	1
63.	Special Equipment Instructor	Senior Technical Lt, Engineer Capt	2
64.	Senior Armaments Instructor	Engineer Capt, Engineer Maj	1
65.	Armaments Instructor	Senior Technical Lt, Engineer Capt	2
66.	Senior Aircraft Instructor	Engineer Capt, Engineer Maj	1
67.	Aircraft Instructor	Senior Technical Lt	2
68.	Senior Aircraft Engine Instructor	Engineer Capt, Engineer Maj	1
69.	Aircraft Engine Instructor	Senior Technical Lt, Engineer Capt	2
70.	Instructors and Senior Instructors in various subjects (cold processing of metals and others)	From an Engineer Capt through an Engineer Lt Col	12
71.	Senior Instructor in the Repair of Aircraft Engines	Engineer Maj, Engineer Lt Col	1
72.	Instructor in the Repair of Aircraft Engines	Engineer Capt, Engineer Maj	2

T/O Officer Total

110

Enlisted Personnel

1.	Motor Vehicle Company Drivers	Pvts	34
2.	Motor Vehicle Company 1st Sgt.	Master Sgt	1
3.	Motor Vehicle Company Mechanics	Senior Sgt	1
4.	Headquarters Clerks and other duty designations of the Quartermaster Service (Khoz'yaistven-Noya Sluzhba)	Sgt	16
5.	Line Communications Specialists (This includes mechanics for the following equipment: the ST-35 (teletype), the "Bode" (teletype), Morse Code equipment and switchboards. This category also includes telegraph line layers.)	Pvts through Master Sgt	20

T/O Enlisted Total

72

Civilian Personnel

1.	Medical Assistants	4
2.	Waitresses	6
3.	Cooks	10
4.	Porters	5
5.	Dishwashers	4
6.	Counter-aids (Buffetchiki)	2
7.	Stokers	5
8.	Electricians	1
9.	Carpenter	1
10.	Painter	1
11.	Storekeepers	1
12.	Drivers	4
13.	Secretary-typists	4
14.	Telephone Operators	6
15.	Telegraph Operators	3
16.	Librarians	3

SECRET/SECURITY INFORMATION

No.	Duty Designation	No of Pers
17.	Accountants	6
18.	Bookkeepers	2
19.	Dining Hall Supervisors	1-2
20.	Manual Laborers (this includes various agricultural and animal husbandry tasks at the school; some of these workers are hired only for the summer season and some are permanent employees)	20
T/O Civilian Personnel Total		<u>92</u>

The permanent personnel excluding civilians consists of 182 persons. The Computation has been made on the basis of 300 students. In such a case, the training groups consist of 25 persons per group. Thus, each battalion would consist of 100 individuals.

It should be mentioned that only the civilian personnel included in the T/O of the school; civilian personnel of the military exchange are not included.

4. The equipment in the training section of an Air Technical Institute will consist of the following:

1. One Gunnery Range (for firing pistols and rifles).
2. Four aircraft engines of various construction utilized in training.
3. Four various type aircraft fuselages (without engines) utilized in training.
4. Board on which are fastened parts of various engine components showing the complete structure of the engine (10-15 such boards).
5. Lathes - to train students in the operation of lathes (five lathes).
6. Metalworking bench and equipment used for the same purpose as 5 above.
7. Carpentry bench (same function as above) 5 of each
8. Drill Presses (same function as above) 5 of each
9. Charts showing sectional views of the structure of aircraft engines of various type construction (10).
10. Charts showing the structure of fuselages from aircraft of different construction (10).
11. Charts illustrating the operation of the oil systems in various aircraft engines (8-10).
12. Charts illustrating the cooling systems in aircraft engines of various type construction (8-10).
13. Charts showing the fuel systems of various aircraft engines (10).
14. Tactical training charts illustrating the defensive organization of ground troops from an infantry squad through an infantry company (12).
15. Charts giving the organization of the Military Air Forces of the Soviet Army up to and including the air divisional level (approximately) (3).
16. Charts showing the organization of the Technical Service in the VVS of the Soviet Army (2).
17. Boards on which are fastened tools that are used for aircraft maintenance in the VVS of the Soviet Army (4-6).
18. Instrument panels with the instruments that are actually installed on aircraft (2).
19. A board on which sectional cuts of instruments are fastened showing the structure and principles of operation of aircraft instruments (2-3).
20. Wind tunnels (2-3).
21. Various instruments found in aircraft repair shops to check defects on various aircraft engine parts (for example: a micrometer or probe) (all are mounted on two boards).
22. A secret library which contains literature required by the students and instructors of the given institute.
 - (a) Engineering - Air Service Manual (25-30)
 - (b) Technical descriptions of various aircraft engines (30-60)
 - (c) Technical descriptions of various construction aircraft (25-30)
 - (d) Instructions for the maintenance of different construction aircraft (50).
 - (e) Garrison Service Regulations (25-30)
 - (f) Unit internal subordination regulations (30).
 - (g) Gunnery Manual (25)
 - (h) Disciplinary Service (Punishments) Manual (40-50).
 - (i) Mikulin's books on "Aircraft Engines" (40-60)
 - (j) Engineer Smulzhenko's books on "Aircraft Construction" (30-50)
 - (k) Manuals dealing with the field service of headquarters (30-40).
 - (l) Infantry combat regulations - Section I & II (25-60).
 - (m) Field Regulations for the Armed Forces of the USSR (10-15).
 - (n) Regulations dealing with the combat application of fighter aircraft (40).
 - (o) ----- of bomber aviation (40)
 - (p) ----- of ground-attack aviation (40)
 - (q) ----- of reconnaissance aviation (40)
 - (r) ----- of transport aviation (40)
 - (s) Books (by an author whose name I cannot remember) on cold processing of metals (25-35).
 - (t) Book on the technology of production (unknown author) (25-40).
 - (u) Communications Service Manual (10).
 - (v) Combat Aviation Regulations (5-10).
 - (w) -----
 - (x) Informational handbooks for the study and generalization of the Great Patriotic War's experiences (50-100).
 - (y) Books (by an unknown author) on "Aircraft Armaments" and a series of other books

23. Chart showing sectional cuts (crash helmet with corrugated hose and cannister) of a gas mask (1).
24. Picture-posters illustrating various anti-chemical defensive articles. These include the following: anti-mustard gas socks, gloves, capes, raincoats, individual first aid packages and a series of other articles necessary to safeguard animals and aircraft (8-10).
25. Sectional cuts of the models of various aerial bombs (including chemical bombs) (6-8).
26. Sectional cuts of various models of aerial detonators and cartridges (12-16)
27. Aircraft cannons and machine guns mounted on stands (Pyramids) in the classes (4-6).
28. Charts showing the ballistical characteristics of aerial bombs (6).
29. Charts showing sectional views of aircraft instruments (10).
30. Sectional models of aircraft electrical equipment (10).
31. Radio receivers, transmitters, converters, antenna structures, and other instruments insuring the operation of radio equipment in the aircraft. All of these are installed in the communications class (10-20).
32. Parallel bars (4-6).
33. Climbing ropes (4).
34. Grenades (20).
35. Loping /Type of swing/ (4).
36. Rings (3).
37. Bar weights (3).
38. Ladders and other equipment for physical training and sports (30-35).
39. Rifle and bayonet (300).
40. Cartridge pouch (300).
41. Combat gas mask (481).
42. Chart posters showing topographical marks (4).
43. A board with sectional cuts of the oxygen equipment used on various type aircraft (1-2).
44. Charts illustrating various methods of camouflaging aircraft (4-6).
45. Sectional models and plain models of rifles and submachine guns (6).
46. Bags for bayonet practice (6).
47. Dummies for bayonet practice (4-6).

All of the above equipment refers to a technical air institute. It is necessary to remember that technical air institutes are divided according to the special training they provide; for example, some technical air institutes train general aircraft technicians, whereas others train only armaments technicians or special equipment technicians. For this reason, each type of institute will have more equipment dealing with the special training they provide and less equipment related to the specialties of other technical air institutes.

Permanent Personnel T/O of a Bomber Pilot Institute (Tactical)

No	Duty Designation	Military Grade	No of Pers
1.	Chief of the Air Institute	Maj Gen, Lt Gen of Aviation	1
2.	Adjutant to the Chief of the Air Institute	Senior Lt, Capt	1
3.	Air Institute Chief of Staff	Maj Gen of Aviation	1
4.	Chief Engineer of the Institute, simultaneously the Deputy Chief of the Institute for Engineering Aviation Service	Maj Gen of Engineer-Aviation Service or Engineer Col	1
5.	Chief of the Air Institute's Medical Service	Col of the Medical Service	1
6.	Deputy Chief of the Air Institute for the Rear	Col of the Quartermaster Service	1
7.	Deputy Chief of the Air Institute for Drill Matters	Lt Col, Col	1
8.	Main Navigator of the Air Institute	Lt Col, Col	1
9.	Chief of the Air Institute's Officer Personnel Section	Lt Col, Col	1
10.	Chief of the Air Institute's Flight Training Section, simultaneously the Institute's Deputy Chief of Staff	Col	1
11.	Chief of the Institute's MIB Counter-Intelligence Section	Lt Col, Col	1
12.	Chief of Communications	Lt Col	1
13.	Chief of the Institute's E M Personnel Section	Capt, Maj of the Administrative Service	1
14.	Chief of the Institute's Finance Section	Capt, Maj of the Quartermaster Service	1
14A	Chief of the Institute's Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen, Maj Gen of Aviation, Col	1
15.	Chief Bookkeeper of the Institute's Finance Section, simultaneously the Deputy Chief of the Finance Section	Capt, Maj of the Quartermaster Service	1

SECRET/SECURITY INFORMATION

- 12 -

16.	Chief of the Institute's Food Section	Maj, Lt Col of the Quartermaster Service	1
17.	Deputy Chief of the Food Section, simultaneously the Chief of the Food Storehouse	Capt, Maj of the Quartermaster Service	1
18.	Chief of the Institute's Clothing and Equipment Supply	Maj, Lt Col of the Quartermaster Service	1
19.	Deputy Chief of the Institute's Clothing and Equipment Supply, simultaneously the Chief of the Clothing and Equipment Storehouse	Capt, Maj of the Quartermaster Service	1
20.	Petroleum, Oil and Lubricants Chief	Capt of the Air Technical Service	1
21.	Chief of the Institute's Technical Supply	Capt, Maj of the Air Technical Service	1
22.	Chief of the Institute's Combat Supply	Capt of the Air Technical Service Maj of Engineers	1 1
23.	Motor Vehicle Company Commander	Capt, Maj	1
24.	Assistant Motor Vehicle Company Commander for Technical Matters	Senior Technical Lt, Engineer Capt	1
25.	Motor Vehicle Platoon Commander	Lt, Senior Lt	2
26.	Chief of the Institute's Secret Section	Senior Lt, Capt of the Administrative Service	1
27.	Assistant Chief of the Institute's Officer Personnel Section	Capt, Maj	1
28.	Assistant Chief of the E M Personnel Section of the Institute	Senior Lt, Capt of the Administrative Service	1
29.	Chief of the Institute's 6th (Cypher) Section	Capt, Maj	1
29A	Chief of the Institute's Meteorological Station	Engineer Capt, Engineer Maj	1
30.	Chief of the Institute's Bombing Range (Polygon)	Lt, Senior Lt	1
31.	Senior Meteorologist	Senior Technical Lt	1
32.	Assistant Chief of the Institute's 6th (Cypher) Section	Senior Lt, Capt	1
33.	Deputy Chief of the Institute for the Rear	Col of the Quartermaster Service	1
34.	MGB Counter-Intelligence Section Investigator	Lt through Maj Incl	2
35.	MGB Counter-Intelligence Section Chief Clerk	Lt	1
36.	Chief of the Tactics Cycle, simultaneously the Deputy Chief of the Institute's Flight Training Section	Lt Col, Col	1
37.	Senior Tactics Instructor	Maj, Lt Col	3
38.	Tactics Training Instructor	Capt, Maj	3
39.	Senior Bombing Training Instructor	Maj, Lt Col	1
40.	Bombing Training Instructor	Capt, Maj	2
41.	Senior Navigation Training Instructor	Maj, Lt Col	1
42.	Navigation Training Instructor	Capt, Maj	2
43.	Senior Communications Instructor	Maj	1
44.	Communications Instructor	Capt, Maj	2
45.	Chief of the Technical Training Cycle	Engineer Lt Col, Engineer Col	1
46.	Senior Technical Training Instructor	Engineer Maj	1
47.	Technical Training Instructor	Engineer Capt	1
48.	Political Section Instructor for Propaganda and Agitation	Senior Lt through Lt Col Incl	1
49.	Political Section Senior Instructor for Propaganda and Agitation	Maj, Lt Col	1
50.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt	1
51.	Deputy Chief of the Institute's Political Section	Maj, Lt Col	1
52.	Senior Military Topography Instructor	Capt, Maj	1
53.	Military Topography Instructor	Senior Lt, Capt	1
54.	Senior Instructor of Physical Training and Sports	Maj	1
55.	Physical Training and Sports Instructor	Senior Lt, Capt	1
56.	Senior Instructor of Aerodynamics	Engineer Maj, Engineer Lt Col	1
57.	Aerodynamics Instructor	Engineer Capt, Engineer Maj	2
58.	Senior Meteorological Training Instructor	Engineer Capt, Engineer Maj	1
59.	Meteorological Training Instructor	Senior Technical Lt, Engineer Capt	1
60.	Senior Chemical Training Instructor	Capt, Maj	1
61.	Chemical Training Instructor	Senior Lt, Capt	1
62.	Senior Aerial Gunnery Training Instructor	Engineer Maj, Engineer Lt Col	1
63.	Aerial Gunnery Training Instructor	Engineer Capt, Engineer Maj	2
64.	Political Section Instructor for Party Records	Senior Lt, Capt	1
65.	Chief of the Residence Maintenance Section	Capt, Maj	1
66.	Chief of the Air Institute's Dispensary	Maj, Lt Col of the Medical Service	1
67.	Therapeutic Physician	Capt, Maj of the Medical Service	1
68.	Ear, Throat and Nose Physician	Capt, Maj of the Medical Service	1
69.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
70.	Institute Engineer for Armaments	Engineer Maj, Engineer Lt Col	1
71.	Institute Engineer for Special Equipment	Engineer Maj, Engineer Lt Col	1
72.	Training Air Regiment Commander	Col	2
73.	Training Air Regiment Chief of Staff	Lt Col, Col	2
74.	Training Air Regiment Deputy Commander for Political Matters	Lt Col, Col	2

SECRET/SECURITY INFORMATION

- 13 -

75.	Training Air Regiment Senior Engineer	Engineer Maj, Engineer Lt Col	2
76.	Regimental Special Equipment Engineer	Engineer Capt, Engineer Maj	2
77.	Regimental Armaments Engineer	Engineer Capt, Engineer Maj	2
78.	Deputy Chief of Staff of the Training Air Regiment	Capt, Maj	2
79.	Chief of Communications of the Training Air Regiment	Capt, Maj	2
80.	Chief of the Officer and E M Personnel Section of the Training Air Regiment	Senior Lt, Capt of the Administrative Service	2
81.	Chief of the Secret Section of the Training Air Regiment	Lt, Senior Lt of the Administrative Service	2
82.	Chief of the Chemical Service of the Training Air Regiment	Senior Lt, Capt	2
83.	Air Squadron Commanders	Maj, Lt Col	4
84.	Air Squadron Deputy Commanders	Capt, Maj	4
85.	Squadron Adjutant (Chief of Staff)	Capt, Maj	4
86.	Squadron Engineer	Engineer Capt, Engineer Maj	4
87.	Squadron Armaments Technician	Senior Technical Lt, Capt of the Air Technical Service	4
88.	Squadron Special Equipments Technician	Senior Technical Lt, Capt of the Air Technical Service	4
89.	Flight Technicians	Technical Lt, Senior Technical Lt	4
90.	Flight Commander	Senior Lt, Capt	4
91.	Pilot-Instructor	Lt, Senior Lt	12
92.	Political Section Agitator	Capt, Maj	1
93.	Training Battalion Commander	Maj, Lt Col	1
94.	Training Company Commander	Senior Lt, Capt	2
95.	Club Chief	Capt	1
96.	Battalion Senior Adjutant	Capt, Maj	1
97.	Training Platoon Commander	Lt, Senior Lt	4
98.	Communications Platoon Commander	Lt, Senior Lt	1
99.	Library Chief	Lt	1
I/O Officer Total			162
		Enlisted Personnel	
1.	Aircraft Mechanics	Master Sgt	64
2.	Armaments Mechanics	Master Sgt	8
3.	Electrical Equipment Mechanics	Master Sgt	8
4.	Instrument Mechanics	Master Sgt	8
5.	Radio Mechanics	Master Sgt	8
6.	Assistant Armaments Mechanics	Sgt	16
7.	Assistant Electrical Equipment Mechanics	Senior Sgt	8
8.	Assistant Radio Mechanics	Senior Sgt	8
9.	Assistant Instrument Mechanics	Sgt	8
10.	Assistant Aircraft Mechanics	Senior Sgt	-
11.	Motion Picture Mechanics	Senior Sgt	1
12.	Institute and Regimental Headquarters Clerks	Sgt, Senior Sgt	6
13.	Storekeepers and Other Supply Positions at Headquarters	Pvt, Sgt	4
14.	Drivers, Motor Vehicle Mechanics and Other Positions in the Motor Vehicle Company	Pvt through Senior Sgt	50
15.	Communications Platoon Personnel (Excluding Officers)	Pvt through Sgt	20
/O Enlisted Total			217
		Civilian Personnel	
.	Nurses		4
.	Medical Assistants		4
.	Laboratory Technician		1
.	Typists		5
.	Dishwashers		4
.	Porters		3
.	Telephone Operators		3
.	Telegraph Operators		3
.	Storekeepers		4
0.	Metalworker (Locksmith)		1
1.	Carpenter		1
2.	Electrician		1
3.	Waitresses		6
4.	Accountants		6
5.	Bookkeepers		2
6.	Librarians		2
7.	Stokers		5
8.	Dining Hall Supervisor		1
9.	Drivers		4
0.	Counter Workers (Buffetchiki)		2
1.	Manual Laborers		15
/O Civilian Personnel Total			77

SECRET/SECURITY INFORMATION

15. Equipment in the training section of an Air Institute for Bomber Pilots will consist of the following objects which will be concentrated in training classrooms, on gunnery and bombing ranges, and in special areas set aside for this purpose:
1. Wind tunnel (there may be a few wind tunnels of varying sizes; however, they will all be installed in classes where students are trained in aerodynamics) (2-4).
 2. Link trainers (4).
 3. Cabins (whose designation I cannot remember) containing radio compass, a radio semi-compass (Radio-Polukompas), and instruments insuring their operation. This equipment is installed in aerial navigation classes (2-4).
 4. Turrets with sighting mechanisms and models of guns actually used on bomber aircraft. These are installed in Aerial Gunnery Service Classes (4).
 5. Combat arms mounted on stands (Piramidi) and an instrument necessary for stripping and assembling the given aerial gun (4-6).
 6. Aircraft engines of various constructions used in bomber aviation (2). These are mounted on metal or wooden stands in technical training classes.
 7. The fuselage of the bomber aircraft on which the students will receive their training (2).
 8. Cabins with sighting mechanisms and combat arms are installed on the gunnery range (3-4).
 9. Charts illustrating the aerodynamic characteristics of bomber aircraft (20).
 10. Charts showing the position of a bomber aircraft during the various stages of flight $\frac{1}{2}$ g during a dive or turn (4-6).
 11. Tripods with sighting mechanisms (6).
 12. Chart showing the appearance of a target from varying distances (10).
 13. Charts showing correct and incorrect take-offs and landings (6).
 14. A cabin used for training pilots in visual orientation (4).
 15. Charts showing the organization of bomber aviation (4-6).
 16. Charts showing the organization of the military air forces of foreign countries (4-8).
 17. A gunnery range equipped with movable and stationary targets, sighting mechanisms mounted on tripods, and aircraft turrets and cabins from which pilots receive aerial gunnery training (18-24).
 18. Sectional cuts of models of various aircraft engines used in bomber aircraft (2).
 19. Models of bomber aircraft (50-100)
 20. Charts showing sectional views of the structure of aircraft spray tanks and universal chemical spray tanks capable of spraying chemicals, gas, etc (4).
 21. Sectional cuts of models of various aerial bombs showing their weight, loading, and complete structure (8-12).
 22. Picture poster showing the characteristics of various objects when contaminated by poisonous military substances (aircraft, localities, etc) (2-4).
 23. Picture showing sectional views of gas masks for people and animals, or, a board to which is fastened actual sectional cuts of gas masks, corrugated hoses, and cannisters (2).
 24. Poster chart showing all of the anti-chemical defense methods. This will include: anti-mustard gas capes, raincoat capes, socks, rubber gloves, rubber shoes, and individual first aid packages for those stricken in a chemical attack (6-12).
 25. Poster chart showing the organization of decontamination points for personnel and aircraft (2). All of these are located in the chemical training class.
 26. Poster showing various types of air masses and indications of their proximity (6-8).
 27. Poster showing storm characteristics, flights through overcasts, and their influence on aircraft flights (2).
 28. Posters showing various types of overcasts and their designation (2).
 29. Table showing local characteristics which can be used in determining weather (2).
 30. Pictures of meteorological instruments (2-4).
 31. Sectional cuts of models of aerial cartridges and shells and their specifications such as their tracer, explosive, armor-piercing, armor-piercing-incendiary, and incendiary qualities (15-20).
 32. Sectional cuts of models of various aerial bombs and detonators, and poster charts showing the type of bomb used with various detonators (12-18).
 33. Aerial cannons and machine guns mounted on stands for student training purposes, and facilities for their stripping (6-8).
 34. Charts showing the defensive organization of an infantry squad, platoon, company and battalion (4-6).
 35. Boards to which are attached parts of engine components from bomber aircraft (6-8).
 36. Posters showing topographical marks which are used to designate localities on charts and maps by the Military Air Forces (2).
 37. Charts showing the ballistic characteristics of aerial bombs and shells (4-6).
 38. Bombing range (1) with various targets (4-6), including dummy motor vehicles, aircraft, and other targets.
 39. Board with sectional cuts of the oxygen equipment used on various type bomber aircraft (2).
 40. Model of a navigator's ruler (2-4).
 41. Model of an aircraft computer (2-4).
 42. Secret library which includes the following important books and documents for training:
 - (a) Aerodynamics books (unknown author) (30-40).
 - (b) Book dealing with aerodynamics at high speeds (unknown author) 20-30).
 - (c) Book dealing with aircraft engines (unknown author) (40-60).
 - (d) Engineer Shulzhenko's books on "Aircraft Construction" (40-60).
 - (e) Manual dealing with the execution of flights (50).

- (f) Colonel Envald's books on "The Theory of Aerial Gunnery" (50-100).
- (g) Navigators' Training Manual (40).
- (h) Instructions dealing with the utilization of various type aircraft in the air (40-50).
- (i) Field Regulations for the Armed Forces of the USSR (10-15).
- (j) Unit internal subordination regulations (30).
- (k) Garrison service regulations (25-30).
- (l) Disciplinary Service (Punishments) Regulations (40).
- (m) "Bombing Training" (unknown author) (50-100).
- (n) Bombing Manual (Rukovodstvo Po Bombometanico) (RB-43) (30-50).
- (o) Manuals dealing with the combat application of fighter, ground-attack, bomber, reconnaissance, and transport aviation (150-200).
- (p) Aviation Combat Regulations (10).
- (q) Manual dealing with the field service of headquarters (30-40).
- (r) High-altitude Training Manual (10-15).
- (s) Communications Service Manual (10).
- (t) Informational handbooks published by the Voroshilov Military Academy (100).
- (u) Books dealing with Military Topography (unknown author) (10-25).
- (v) Physical Training and Sports Program of the Military Air Forces (10).
- (w) Intelligence bulletins pertaining to foreign troops (40).
- (x) Informational handbooks for the study and generalization of the Great Patriotic War's experiences (100).

In addition, this library contains a series of other books which are required by students for study purposes and by instructors to prepare for their classes (200-300).

16. Thus, an Air Institute for Bomber Pilots has the following number of permanent officer personnel - 162 persons; permanent enlisted personnel - 217 persons; permanent civilian personnel - 77 persons. Total permanent personnel - 456 persons.
17. If the civilian personnel of the institute are not taken into account, the institute's permanent personnel number 379. By my computation, there are 300 students in an Air Institute for Bomber Pilots.
18. In similarity to an Air Institute for Fighter Pilots, this institute also has two training air regiments and one battalion. However, there is a considerable difference in the number of personnel and aircraft between the two institutes. Each air regiment in an Institute for Bomber Pilots consists of two squadrons, and each squadron of which two aircraft are IL-2's or IL-12's, three are combat trainers of various types, and three are combat aircraft of the frontal bomber type. Thus, each air regiment has 16 bomber aircraft of different types.
19. The number of aircraft in an Air Institute for Bomber Pilots is smaller, since the training of students in the techniques of piloting aircraft is simplified due to the fact that a group of 12-15 students can be taken up simultaneously on such an aircraft as the IL-2 or IL-12 and then can be instructed for a considerable period of time on these aircraft. The fighter and ground-attack institutes are at a disadvantage here since they can take up only one student at a time.
20. The T/O of the Air Institute for Bomber Pilots given above does not refer to long-range aviation, since the long range air institutes were separate during the Great Patriotic War (World War II) and in my opinion, are still separate. There is some difference between the T/O's of long-range air institute and an air institute for Bomber Pilots.
21. It must be pointed out that the Air Institute for Bomber Pilots graduates pilots for military transport aviation also, since there are no special air institutes for transport pilots in the VVS of the Soviet Army.
22. The reason for this is that there is no particular need for such institutes since bomber pilots can always be converted into transport pilots.

Permanent Personnel T/O of a Navigators' Air Institute

No	Duty Designation	Military Grade	No of Pers
1.	Chief of the Air Institute (Navigators')	Lt Gen of Aviation, Maj Gen of Aviation	1
2.	Adjutant to the Chief of the Air Institute	Senior Lt, Capt	1
3.	Institute Chief of Staff	Maj Gen of Aviation	1
4.	Main Engineer of the Institute	Maj Gen of the Engineer Aviation Service, Engineer C6L	1
5.	Deputy Chief of the Institute for Drill Matters	Lt Col, Col	1
6.	Deputy Chief of the Institute for the Rear	Col of the Quartermaster Service	1
7.	Chief of the Institute's Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen, Maj Gen of Aviation, Col	1
8.	Chief of the Institute's Medical Service	Col of the Medical Service	1
9.	Main Navigator of the Air Institute	Lt Col, Col	1
10.	Chief of the Institute's Officer Section	Lt C6L, Col	1

11.	Chief of the MGB Counter-Intelligence Section	Lt Col, Col	1
12.	Chief of the Flight-Training Section, simultaneously the Deputy Chief of Staff of the Institute	Col	1
13.	Chief of the Institute's Communications	Lt Col, Col	1
14.	Chief of the Institute's E M Personnel Section	Capt, Maj of the Administrative Service	1
15.	Chief of the Institute's Finance Section	Capt, Maj. of the Quartermaster Service	1
16.	Main bookkeeper of the Finance Section, simultaneously the Deputy Chief of the Section	Capt, Maj of the Quartermaster Service	1
17.	Main Bookkeeper of the Institute's Food Section	Maj of the Quartermaster Service	1
18.	Deputy Chief of the Food Section, simultaneously the Chief of the Food Storehouse	Capt, Maj of the Quartermaster Service	1
19.	Chief of the Institute's Clothing and Equipment Supply	Maj of the Quartermaster Service	1
20.	Deputy Chief of the Institute's Clothing and Equipment Supply, simultaneously the Chief of the Clothing and Equipment Storehouse	Capt, Maj of the Quartermaster Service	1
21.	Petroleum, Oil and Lubricants Chief	Senior Technical Lt, Capt of the Air Technical Service	1
22.	Chief of the Institute's Technical Supply	Capt of the Air Technical Service Engineer Maj	1
23.	Chief of the Institute's Ammunition Supply	Capt of the Air Technical Service Engineer Maj	1
24.	Commander of the Institute's Motor Vehicle Company	Capt, Maj	1
25.	Assistant Commander of the Motor Vehicle Company for Technical Matters	Senior Technical Lt, Engineer Capt	1
26.	Assistant Chief of the Institute's Personnel Section	Capt, Maj	1
27.	Assistant Chief of the Institute's E M Personnel Section	Senior Lt, Capt of the Administrative Service	1
28.	Motor Vehicle Platoon Commander	Lt, Senior Lt	1
29.	Chief of the Institute's Secret Section	Senior Lt, Capt of the Administrative Service	1
30.	Chief of the Institute's 6th Section (Cipher Service)	Capt, Maj	1
31.	Assistant Chief of the Institute's 6th Section	Senior Lt, Capt	1
32.	Chief of the Institute's Meteorological Station	Engineer Capt, Engineer Maj	1
33.	Chief of the Institute's Bombing Range	Lt, Senior Lt	1
34.	Senior Meteorologist	Senior Technical Lt	1
35.	MGB Counter-Intelligence Section Investigator	Lt through Maj Incl	1
37.	Chief of the Tactics Training Cycle, simultaneously the Deputy Chief of the Flight-Training Section	Maj, Lt Col	1
38.	Senior Instructor in Tactics Training	Maj, Lt Col	1
39.	Tactics Training Instructor	Capt, Maj	2
40.	Senior Instructor in Bombing Training	Maj, Lt Col	1
41.	Bombing Training Instructor	Capt, Maj	2
42.	Navigators' Senior Training Instructor	Maj, Lt Col	2
43.	Navigators' Training Instructor	Capt, Maj	3
44.	Senior Communications Instructor	Maj, Lt Col	1
45.	Chief of the Navigators' Training Cycle	Lt Col, Col	1
46.	Communications Instructor	Capt, Maj	3
47.	Chief of the Technical Training	Engineer Lt Col Engineer Col	1
48.	Senior Instructor in Technical Training	Engineer Maj	1
49.	Technical Training Instructor	Engineer Capt	1
50.	Senior Instructor in Physical Training and Sports	Maj	1
51.	Physical Training and Sports Instructor	Senior Lt, Capt	1
52.	Instructor of the Political Section for Propaganda and Agitation	Senior Lt through Lt Col Incl	1
53.	Senior Instructor in Meteorological Training	Engineer Capt, Engineer Maj	1
54.	Meteorological Training Instructor	Senior Technical Lt, Engineer Capt	2
55.	Senior Instructor in Chemical Training	Capt, Maj	1
56.	Chemical Training Instructor	Senior Lt, Capt	1
57.	Senior Instructor in Aerial Gunnery Training	Engineer Maj, Engineer Lt Col	1
58.	Aerial Gunnery Training Instructor	Engineer Capt, Engineer Maj	2
59.	Political Section Instructor for Party Records	Senior Lt, Capt	1
60.	Institute Engineer for Armaments	Engineer Maj, Engineer Lt Col	1
61.	Chief of the Dispensary	Maj, Lt Col of the Medical Service	1
62.	Therapeutic Physician	Capt, Maj of the Medical Service	1
63.	Ear, Nose and Throat Physician	Capt, Maj of the Medical Service	1
64.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
65.	Senior Instructor in Aerodynamics	Engineer Maj, Engineer Lt Col	1
66.	Aerodynamics Instructor	Engineer Capt, Engineer Maj	2
67.	Chief of the Residence Maintenance Section	Capt, Maj	1
68.	Deputy Chief of the Institute's Political Section	Maj, Lt Col	1
69.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt	1
36.	Chief Clerk of the MGB Counter Intelligence Section	Lt	1

SECRET/SECURITY INFORMATION

-17, -

70.	Senior Instructor in Military Topography	Capt	1
71.	Military Topography Instructor	Senior Lt	1
72.	Senior Instructor of the Political Section for Propaganda and Agitation	Maj, Lt-Col	1
73.	Institute Engineer for Special Equipment	Engineer Maj, Engineer Lt Col	1
74.	Training Air Regiment Commander	Col	1
75.	Training Air Regiment Chief of Staff	Lt Col, Col	1
76.	Deputy Commander of the Regiment for Political Matters	Lt Col, Col	1
77.	Senior Engineer of the Training Air Regiment	Engineer Maj, Engineer Lt Col	1
78.	Regimental Engineer for Special Equipment	Engineer Capt, Engineer Maj	1
79.	Regimental Engineer for Armaments	Engineer Capt, Engineer Maj	1
80.	Training Air Regiment Deputy Chief of Staff	Capt, Maj	1
81.	Training Air Regiment Chief of Communications	Capt, Maj	1
82.	Training Air Regiment Chief of the E M and Officer Personnel Section	Senior Lt, Capt of the Administrative Service	1
83.	Chief of the Secret Section of the Training Air Regiment	Lt, Senior Lt of the Administrative Service	1
84.	Chief of the Regiment's Chemical Service	Senior Lt, Capt	1
85.	Air Squadron Commanders	/sig/	3
86.	Deputy Air Squadron Commanders	/sig/	3
87.	Squadron Chief of Staff	Capt, Maj	3
88.	Squadron Engineer	Capt, Maj	3
89.	Squadron Senior Armaments Technician	Senior Technical Lt, Capt of the Air Technical Service	3
90.	Squadron Senior Special Equipment Technician	Senior Technical Lt, Capt of the Air Technical Service	3
91.	Flight Technician	Technical Lt, Senior Technical Lt	3
92.	Political Section Agitator	Capt, Maj	1
93.	Training Battalion Commander	Maj, Lt Col	2
94.	Flight Commander	Senior Lt, Capt	3
95.	Training Company Commander	Senior Lt Capt	4
96.	Battalion Senior Adjutant	Capt, Maj	2
97.	Training Platoon Commander	Lt, Senior Lt	8
98.	Communications Platoon Commander	Lt, Senior Lt	1
99.	Chief of the Club	Capt	1
00.	Chief of the Library	Lt	1
01.	Air Squadron Navigator	Capt, Maj	3
02.	Flight Navigator	Senior Lt, Capt	3
03.	Senior Pilot	Senior Lt, Capt	6
04.	Regimental Navigator	Maj, Lt Col	1
05.	Navigator Instructor	Senior Lt, Capt	3
*O Officer total			154

Enlisted Personnel

1.	Aircraft Mechanic	Senior Sgt, Master Sgt	36
2.	Armaments Mechanic	Master Sgt	6
3.	Radio Mechanic	Master Sgt	3
4.	Instrument Mechanic	Master Sgt	3
5.	Electrical Equipment Mechanic	Master Sgt	3
6.	Assistant Aircraft Mechanic	Sgt	-
7.	Assistant Armaments Mechanic	Sgt	12
8.	Assistant Electrical Equipment Mechanic	Sgt	3
9.	Assistant Radio Mechanic	Sgt	3
10.	Assistant Instrument Mechanic	Sgt	3
11.	Motion Picture Mechanic	Senior Sgt	1
12.	Headquarters Clerk	Sgt, Senior Sgt	4
13.	Various Types of Supply Duty Designations	Sgt	4
14.	Drivers, Auto Mechanics and Other Specialists of the Motor Vehicle Company	Pvt through Senior Sgt	40
15.	Communications Platoon Personnel (Excluding Officers)	Pvt through Senior Sgt	20
T/O Enlisted Total			141

Civilian Personnel

1.	Waitress		6
2.	Nurse		4
3.	Medical Assistant		3
4.	Laboratory Technician		1
5.	Typist		4-5
6.	Dishwasher		4
7.	Clean-up Woman		3
8.	Telegraph Operator		3
9.	Telephone Operator		3
10.	Storekeeper		3
11.	Metalworker (Locksmith)		1
12.	Carpenter		1

SECRET/SECURITY INFORMATION

SECRET/SECURITY INFORMATION

- 18 -

13. Electrician	1
14. Librarian	2
15. Accountant	4
16. Driver	4
17. Stoker	5
18. Counter-helper	2
19. Dining Room Supervisor	1
20. Manual Laborer	15

T/O Civilian Personnel Total

71

23. The training section of an Air Institute for Navigators (prior to World War II these institutions were known as Air Institute for Pilot/Observer) is equipped with the following articles which are required for the training of students. (All of the equipment listed below is concentrated in classrooms, halls, and at the gunnery and bombing ranges.)

1. Aircraft engines of different constructions used in bomber aviation; two of these are set on special stands in the technical classrooms.
2. Wind tunnel; one wind tunnel is installed in the aerodynamics class.
3. Cabins with radio semi-compasses (of the RPK-2 or RPK-10 type) and radio compasses (of the RK-45 type). There are six such cabins which are installed in classrooms that are used in navigation training.
4. Turrets with sighting mechanisms and model guns. There are four such turrets and they are installed in aerial gunner training classes.
5. Bomber aircraft fuselages which are set up in hangars or in one of the halls (2).
6. Model navigators' rulers (of the NL-8 type) which are kept in the navigation training classes. There are six such rulers. The latest type of navigators' ruler is known as the NL-8.
7. Aircraft computer models are located in the navigation training classes (6).
8. Models of protractors (6) are kept in the navigation training classes.
9. Sectional cuts of models of different bomber aircraft engines. There are four such models which are in miniature dimensions. The models are located in the technical training classes.
10. Gunnery range with movable and stationary targets, sighting mechanisms mounted on tripods, turrets with combat guns, and cabins with sighting mechanisms and combat guns used in the training of students in aerial gunnery (20).
11. Charts showing the aerodynamical characteristics of bomber aircraft (16); these are located in the aerodynamics classes.
12. Sighting mechanisms mounted on tripods are installed in the aerial gunnery training classes (4).
13. Miniature models of bomber aircraft are located in the tactics training classes (40).
14. Cabins with instrument and bomb-sights; under these, there is a moving cloth on which a locality is drawn in exactly the same way as it would look to a navigator from the air. These cabins are located in a special hall. They are used for the purpose of training students to conduct visual orientation, sight through a bomb-sight, and to make necessary computations when bombing large and small area targets. There are eight such cabins in the above-mentioned hall.
15. Sectional cuts of models showing the structure of aircraft spray tanks and universal chemical spray tanks. There are four such models in chemical training classes.
16. Actual size models of aircraft bombs showing sectional views of these bombs, their weight, load and complete structure. There are eight to sixteen such models in bombing classes.
17. Charts showing the organization of bomber aviation (4-6); all of these are located in the secret library but are taken to the tactics training classes prior to class meetings in this subject.
18. Charts giving the organization of foreign Military Air Forces (4-8); these charts are also located in the secret library but appear in tactics training classes prior to class meetings dealing with this topic.
19. Charts showing the position of a bomber aircraft when it is approaching target and while it is bombing. All of these charts are located in bombing classes.
20. Posters showing the characteristics of various objects when contaminated by combat poisonous substances of the enemy and the type of indicators or signs that should be placed in these locations after the state of contamination is discovered. These posters are located in chemical training classes. There are four such posters.
21. Posters showing sectional views of the structure of various gas masks. These gas masks include one for people and for animals. There are four such posters. In addition, there may be boards with actual sectional cuts of combat gas masks mounted on them (2). All of these will be located in chemical training classes.
22. Charts showing anti-chemical defense equipment such as shelters, anti-mustard gas capes, raincoat capes, stockings, rubber gloves and boots, and individual first aid packages to be used by victims of an enemy's chemical attack (10). All of these charts are permanently located in the secret library but can be brought to chemical training classes when needed during class sessions.

SECRET/SECURITY INFORMATION

23. Chart showing the organization of decontamination and washing points used to decontaminate aircraft and personnel (23).
24. Charts showing the type of area and proper altitude from which a smokescreen can be layed with a UKhAP (Universal chemical spray tank). The charts give the following information: Duration of effectiveness, type of area and proper altitude, and the wind and aircraft speeds at which a given area can be effectively sprayed with combat poisonous agents. There are approximately ten such charts which are kept in the secret library (in the same manner as in points 22 and 23) except when needed at meetings of chemical training classes.
25. Charts showing thunderstorm characteristics and their influence of aircraft flights (2-4) These charts are kept in the meteorological training class permanently.
26. Charts showing various types of aerial masses, their development, indications of proximity to a given area, the speed with which they move and the weather within them (6-8). They are permanently kept in the meteorological training class.
27. Charts showing various types of overcasts and their development (2); these are also located in the meteorological training class.
28. Tables showing local characteristics which can be used to determine weather and giving an explanation of these characteristics (2).
29. Pictures showing various meteorological instruments and the principles of their operations (2). These pictures are permanently located in the secret library and are brought to the meteorological training class only when needed for training purposes.
30. Models of various aerial shells and cartridges with a designation of their function (such as incendiary, tracers, armor-piercing, etc.) (15-20). These are mounted on a special board or are fastened to the table in the aerial gunnery training class.
31. Aircraft cannons and machine guns mounted on stands or special tables. In addition, there will be instruments used in stripping and assembling on this table (4-6). These are located in the aerial gunnery training classes.
32. Charts showing the defensive organization from the infantry squad level to the infantry battalion level inclusive (4-6). These charts hang on the walls of the tactics class.
33. Pictures showing the appearance of a target through a gunner's sight at a specified distance (the term "gunner" as used here designates any member of a bomber crew who fires the aircraft's guns when it is attacked by enemy fighters). These pictures are located in the aerial gunnery training class (4).
34. A bombing range (Polygon) which is equipped with various targets.
35. Boards to which are fastened parts of different aircraft engine components (4-6). These are located in the technical training classes.
36. Boards to which sectional cuts of a bomber aircraft's oxygen equipment is fastened (2). These are located in the technical training classes.
37. Posters showing topographical marks that designate localities on maps (2). These posters hang in tactics classes.
38. Pictures showing the structure of various aerial cameras and the operating principles of different parts of these cameras (4). These pictures are kept in the secret library and are displayed in the tactics classes only during training periods.
39. Table showing international meteorological symbols which designate various weather conditions on meteorological maps (1). This table is located in the meteorological training class.
40. Table giving the international meteorological code (1). This is also permanently located in the meteorological training class.
41. Tables on which Morse telegraph keys are installed. These are used in training students in receiving and transmitting by ear. These tables are located in navigators' training and communications classes. There are 150 keys installed on each table.
42. The radio equipment of a bomber aircraft - such as a receiver, transmitter, generator, antenna structure, converter, microphone, and a throat microphone. One or two of each of the above mentioned pieces of equipment is located in each communications class.
43. Charts giving the ballistic characteristics of aerial guns, bombs and shells (4-6). The charts giving the gun and shell data are in the aerial gunnery training classrooms; those dealing with bombs are in the bombing class.
44. The secret library contains the following different types of secret literature which are required for training purposes:
 - (a) Manual dealing with the execution of flights (50).
 - (b) Books dealing with military topography (10-25).
 - (c) Manual dealing with high-altitude training (10-15).
 - (d) Aviation combat regulations (10).
 - (e) Navigators' Service Manual (40-100).
 - (f) Books dealing with aerodynamics (30-40).
 - (g) Books dealing with aerodynamics at high speeds (20-30).
 - (h) Books dealing with "Aircraft Engines" (unknown author) (40-60).
 - (i) Engineer Shulzhenko's books on "Aircraft Construction" (40-60).
 - (j) Field Regulations of the Armed Forces of the USSR (10-15).
 - (k) Colonel Envald's books on the theory of aerial gunnery (50-100).
 - (l) Instructions on the operation of aircraft of different construction (40-60).
 - (m) Communications Service Manual (10)
 - (n) Unit Internal Subordination Regulations of the Armed Forces of the USSR (30-70).
 - (o) Garrison Service Regulations of the People's Commissar of Defense of the USSR (25-30).
 - (p) Disciplinary (Punishment) Service Regulation (40-60).
 - (q) Bombing Manual (RB-43) (50-100).
 - (r) Manuals dealing with the combat application of fighter, bomber, ground-attack, reconnaissance, and transport aviation of 1945 (150-200).

SECRET/SECURITY INFORMATION

- 20 -

- (s) Informational handbooks published by the Voroshilov Military Academy of the General Staff (100-150).
- (t) Physical Training and Sports Program for the VVA (10).
- (u) Intelligence Bulletins dealing with the organization of foreign armies (40).
- (v) Regulations and manuals of foreign armies translated into Russian (20-30).
- (w) Informational handbooks for the study and generalization of experiences of the Great Patriotic War (100).
- (x) Book dealing with the Aerial Photo Service (25-35).

In addition, the secret library contains a series of other books which are required by students for study purposes and by instructors to prepare for classes.

Thus the permanent personnel T/O of a Navigators' Air Institute is:

Permanent Officer Personnel -	154
Permanent Enlisted Personnel -	141
Permanent Civilian Personnel -	<u>71</u>
Total	366

If the civilian personnel are excluded from the computation, the institute's permanent military personnel T/O is 295 individuals.

According to my computation, the student personnel of the institute will be approximately 300 persons.

23. This air institute has one air training regiment which consists of three squadrons made up of two flights each. Each flight has three aircraft and each squadron six. One flight in each squadron is equipped with Il-2 or Il-12 aircraft and the other with Pe-2's, Tu-2's or other types of aircraft found in bomber aviation. Thus the above air regiment is equipped with 18-20 aircraft of the above mentioned types.

This institute trains navigators for bomber, transport, and reconnaissance aviation. During World War II and the post-war period of 1945-1946, long range aviation had its own separate air institutes for pilots and navigators. At present, these schools may be under long range aviation or under the control of VUZov of the VVS, but regardless of control, they train pilots and navigators for long range aviation only.

Permanent Personnel T/O of a Military Air Institute for Long Range Aviation Navigators

<u>Duty Designation</u>	<u>Military Grade</u>	<u>No of Pers</u>
Chief of the Air Institute for Long Range Aviation Navigators	Maj Gen of Aviation, Lt Gen of Aviation	1
Adjutant to the Chief of the Institute	Senior Lt, Capt	1
Air Institute Chief of Staff	Maj Gen of Aviation	1
Chief of the Institute's Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen of Aviation, Col	1
Deputy Chief of the Institute for Drill Matters	Lt Col, Col	1
Deputy Chief of the Institute for the Rear	Lt Col, Col of the Quartermaster Service	1
Chief of the Institute's Medical Service	Col of the Medical Service	1
Air Institute Main Navigator	Col	1
Air Institute Main Engineer	Maj Gen of the Aviation-Engineer Service, Engineer Col	1
Chief of the Air Institute's MGB Counter-Intelligence Section	Lt Col, Col	1
Chief of the Institute's Flight Training Section, simultaneously the Institute's Deputy Chief of Staff	Col	1
Chief of the Air Institute's Officer Personnel Section	Lt Col	1
Chief of the Institute's Communications	Lt Col, Col	1
Chief of the Institute's Secret Section	Senior Lt, Capt of the Administrative Service	1
Chief of the Institute's 6th Section (Cypher Service)	Capt, Maj	1
Assistant Chief of the Institute's 6th Section	Senior Lt, Capt	1
Chief of the Institute's Meteorological Station	Engineer Capt, Engineer Maj	1
Chief of the Institute's Bombing Range	Lt, Senior Lt	1
MGB Counter-Intelligence Section	Lt Through Maj Incl	2
Senior Meteorologist	Senior Technical Lt	1
Motor Vehicle Platoon Commander	Lt, Senior Lt	2
Chief Clerk of the MGB Counter-Intelligence Section	Lt	1
Chief of the Tactics Training Cycle, simultaneously the Deputy Chief of the Flight Training Section	Maj, Lt Col	1

SECRET/SECURITY INFORMATION

SECRET/SECURITY INFORMATION

- 21 -

24.	Senior Tactics Training Instructor	Maj, Lt Col	1
25.	Tactics Training Instructor	Capt, Maj	2
26.	Senior Bombing Training Instructor	Maj, Lt Col	1
27.	Bombing Training Instructor	Capt, Maj	2
28.	Chief of the Institute's E M Personnel Section	Capt, Maj of the Administrative Service	1
29.	Chief of the Institute's Finance Section	Capt, Maj of the Quartermaster Service	1
30.	Main Bookkeeper of the Finance Section, simultaneously the Deputy Chief of the Finance Section	Capt, Maj of the Quartermaster Service	1
31.	Chief of the Institute's Food Section	Maj of the Quartermaster Service	1
32.	Deputy Chief of the Food Section, simultaneously the Chief of the Food Storehouse	Capt, Maj of the Quartermaster Service	1
33.	Chief of Clothing and Equipment Supply	Maj of the Quartermaster Service	1
34.	Deputy Chief of Clothing and Equipment Supply, simultaneously the Chief of the Clothing and Equipment Storehouse.	Capt, Maj of the Quartermaster Service	1
35.	Petroleum, Oil and Lubricants Chief	Senior Technical Lt, Capt of the Air Technical Service	1
36.	Chief of the Institute's Technical Supply	Capt of the Air Technical Service, Engineer Maj	1
37.	Chief of the Institute's Ammunition	Capt of the Air Technical Service, Engineer Maj	1
38.	Motor Vehicle Company Commander	Capt, Maj	1
39.	Motor Vehicle Assistant Commander for Technical Matters	Senior Technical Lt, Engineer Capt	1
40.	Assistant Chief of the Institute's E M Personnel Section	Senior Lt, Capt of the Administrative Service	1
41.	Senior Navigator's Training Instructor	Maj, Lt Col	2
42.	Navigators' Training Instructor	Capt, Maj	3
43.	Senior Communications Instructor	Maj, Lt Col	1
44.	Chief of the Navigators' Training Cycle	Lt Col, Col	1
45.	Communications Instructor	Capt, Maj	3
46.	Chief of the Technical Training Cycle	Engineer Lt Col, Engineer Col	1
47.	Senior Technical Training Instructor	Engineer Maj	1
48.	Technical Training Instructor	Engineer Capt	1
49.	Senior Physical Training and Sports Instructor	Maj	1
50.	Physical Training and Sports Instructor	Senior Lt, Capt	2
51.	Senior Chemical Training Instructor	Capt, Maj	1
52.	Chemical Training Instructor	Senior Lt, Capt	1
53.	Political Section Instructor for Party Records	Senior Lt through Lt Col Incl	1
54.	Senior Meteorological Training Instructor	Engineer Capt, Engineer Maj	1
55.	Meteorological Training Instructor	Senior Technical Lt, Engineer Capt	2
56.	Senior Military Topography Instructor	Capt	1
57.	Military Topography Instructor	Senior Lt	2
58.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt	1
59.	Deputy Chief of the Institute's Political Section	Maj, Lt Col	1
60.	Chief of the Institute's Residence Maintenance Section	Capt, Maj	1
61.	Senior Aerial Gunnery Training Instructor	Engineer Maj, Engineer Lt Col	1
62.	Aerial Gunnery Training Instructor	Engineer Capt, Engineer Maj	2
63.	Political Section Instructor for Party Records	Senior Lt, Capt	1
64.	Engineer of the Institute for Armaments	Engineer Maj, Engineer Lt Col	1
65.	Chief of the Dispensary	Maj, Lt Col of the Medical Service	1
66.	Therapeutic Physician	Capt, Maj of the Medical Service	1
67.	Ear, Nose and Throat Physician	Capt, Maj of the Medical Service	1
68.	Ophthalmologist	Capt of the Medical Service	1
69.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
70.	Senior Aerodynamics Instructor	Engineer Maj, Engineer Lt Col	1
71.	Aerodynamics Instructor	Engineer Capt, Engineer Maj	1
72.	Political Section Instructor for Propaganda and Agitation	Maj, Lt Col	1
73.	Engineer of the Institute for Special Equipment	Engineer Maj, Engineer Lt Col	1
74.	Political Section Agitator	Capt, Maj	1
75.	Training Battalion Commander	Maj, Lt Col	2
76.	Training Company Commander	Senior Lt, Capt	4
77.	Senior Battalion Adjutant	Capt, Maj	2
78.	Training Platoon Commander	Lt, Senior Lt	8
79.	Communications Platoon Commander	Lt, Senior Lt	1
80.	Chief of the Club	Capt	1
81.	Chief of the Library	Lt	1
82.	Commander of the Training Air Regiment	Col	1
83.	Chief of Staff of the Training Regiment	Lt Col, Col	1
84.	Deputy Commander of the Training Air Regiment for Political Matters	Lt Col, Col	1

SECRET/SECURITY INFORMATION

- 22 -

85.	Senior Engineer of the Training Air Regiment	Engineer Maj, Engineer Lt Col	1
86.	Regimental Engineer for Special Equipment	Engineer Capt, Engineer Maj	1
87.	Regimental Engineer for Armaments	Engineer Capt, Engineer Maj	1
88.	Deputy Chief of Staff of the Training Air Regiment	Maj, Lt Col	1
89.	Training Air Regiment Chief of Communications	Capt, Maj	1
90.	Chief of the Regimental Chemical Service	Senior Lt, Capt	1
91.	Chief of the Officer and E M Personnel Section of the Training Air Regiment	Senior Lt, Capt of the Administrative Service	1
92.	Chief of the Secret Section of the Training Air-Regiment	Lt Senior Lt of the Administrative Service	1
93.	Commanders of Training Air Squadrons	Maj, Lt Col	3
94.	Deputy Commanders of Training Air Squadrons	Capt, Maj	3
95.	Flight Commanders	Senior Lt, Capt	3
96.	Squadron Navigator	Capt, Maj	3
97.	Training Air Regiment Navigator	Maj, Lt Col	1
98.	Senior Pilots	Senior Lt, Capt	6
99.	Navigator Instructor	Senior Lt, Capt	3
00.	Squadron Chief of Staff	Capt, Maj	3
01.	Squadron Engineer	Engineer Capt, Engineer Maj	3
02.	Aircraft Technician	Technical Lt	18
03.	Flight Navigator	Senior Lt, Capt	3
04.	Senior Squadron Technician for Armaments	Senior Technical Lt, Capt of the Air Technical Service	3
05.	Senior Squadron Technician for Special Equipment	Senior Technical Lt, Capt of the Air Technical Service	3
06.	Flight Technician	Senior Technical Lt, Capt of the Air Technical Service	3

W/O Officer Total 176

Enlisted Personnel

1.	Aircraft Mechanics	Master Sgt, Senior Sgt	54
2.	Armaments Mechanics	Senior Sgt	12
3.	Instrument Mechanics	Senior Sgt	6
4.	Special Equipment Mechanics	Senior Sgt	6
5.	Radio Mechanics	Senior Sgt	6
6.	Assistant Aircraft Mechanics	Senior Sgt	54
7.	Assistant Armaments Mechanics	Sgt	36
8.	Assistant Radio Mechanics	Sgt	12
9.	Assistant Electrical Equipment Mechanics	Sgt	12
10.	Assistant Instrument Mechanics	Sgt	12
11.	Aerial Gunners/Radio Operators	Senior Sgt	18
12.	Aerial Gunners	Sgt	36
13.	Motion Picture Mechanic	Senior Sgt	1
14.	Headquarters Clerks and Other Supply Positions	Sgt	8
15.	Drivers, Mechanics and Other Specialties in the Motor Vehicle Company	Pvt through Senior Sgt Incl	80
16.	Communications Platoon Personnel (Excluding Officers)	Senior Sgt	20

W/O Enlisted Total 373

Civilian Personnel

1.	Nurse		6
2.	Waitress		6
3.	Medical Assistant		4
4.	Typist		1
5.	Laboratory Technician		6
6.	Telephone Operator		3
7.	Telegraph Operator		3
8.	Clean-up Woman		5
9.	Dishwasher		5
10.	Driver		6
11.	Counter Assistant		3
12.	Manual Laborer		15
13.	Stoker		5
14.	Dining Hall Supervisor		1
15.	Accountant		4
16.	Storekeeper		3
17.	Metal Worker (Locksmith)		2
18.	Carpenter		1
19.	Electrician		2
20.	Librarian		2

W/O Civilian Personnel Total 83

SECRET/SECURITY INFORMATION

- 23 -

24. The training section of an Air Institute for Long Range Aviation Navigators is equipped with property required by students for training purposes, and by instructors for preparation. Basically, this air institute is equipped in the same way as the training section of an Air Institute for Frontal Aviation Navigators; however, this institute does have some equipment that the Air Institute for Frontal Aviation Navigators does not have and vice-versa. There are further differences in T/E between these institutes in respect to the quantity of models, charts, and other property belonging to the institutes.
25. This particular Air Institute's training section has the following additional equipment which an Air Institute for Frontal Aviation Navigators does not have:
1. Models of sextants in section cuts (4-6); these models are located in the navigators' class.
 2. Cabins with installed radio compasses and radio semi-compasses (10); these are located in the navigators' class.
 3. Models of navigation rulers of the NL-8 type are kept in the navigators' training class (8).
 4. A gunnery range which is equipped with movable and stationary targets, turrets with sighting mechanisms and combat arms used on these turrets, and cabins equipped in the same manner as the turrets and used in aerial gunnery training. There is a total of 30 targets, cabins and turrets.
 5. Fuselages from bomber aircraft of the type with which long range aviation is equipped. The fuselages are located in hangars (2-3).
 6. Charts showing celestial orientation during night flights (6).
 7. Charts showing aerial navigation methods with the use of radio beacons (6); these charts are located in navigators' training classes.
 8. Charts showing methods of aerial navigation using radio equipment (12); these charts are located in the navigators' training classes.
 9. Charts showing computation data required in night bombing (8); these are located in the bombing training class.
 10. Charts showing maneuvers utilized by aircraft and groups to avoid antiaircraft artillery along the course and in the target area (6); these are located in the tactics classes.
 11. Charts showing a mass converging attack on a large enemy objective from all sides (Zvezdnyi Massirovani i Nalet) at night (4); these are located in the tactics classes.
 12. Charts showing aerial navigation methods with the use of broadcasting stations (4); these are permanently located in the navigators' training classes.
 13. Models of aircraft with which long range aviation is equipped (100-150 models) these are permanently located in the tactics classes.
 14. Manuals dealing with the combat application of long range aviation (100); these are located in the secret library.
 15. Posters showing natural storm characteristics and their influence on long range aviation flights (4); these are located in meteorological training classes.
 16. Charts showing methods of aerial navigation under difficult weather conditions (4); these are located in meteorological training classes.
 17. Boards on which sectional cuts of parts from the type of oxygen equipment used on long range aviation aircraft are fastened (4-6); these are fastened to the walls of the special equipment classes.
 18. Posters showing aerial cameras which are used in night photography (1-2); these are located in the tactics training classes while studies are being conducted and in the secret library the rest of the time.
 19. Table to which morse telegraph keys are fastened. These are used in training student navigators to receive and transmit by ear. There will be approximately 200 keys in the navigators' training and communications classes.
 20. Radio equipment from the types of aircraft with which long range aviation is equipped. Such equipment will include: radio receivers, transmitters, antenna structures, generators, converters, microphones, throat microphones, and other equipment required for the operation of aircraft radio equipment. There will be four of each of the above components; all of this property is permanently located in the communications classes.
26. This air institute for long range aviation navigators has two training battalions, each of which consists of two training companies. Each training company is composed of two training platoons. In addition, this institute has one training air regiment consisting of three squadrons, each squadron of two flights, and each flight of three aircraft. One flight in the squadron will have Il-12 or Tu-70-type aircraft, and the second flight will be equipped with combat aircraft of the long range aviation type (this includes such types as the Tu-4, Pe-8, Il-4 and others).
27. However, the following variant is also possible. The second flight of the first squadron may be equipped with combat aircraft of the Il-4-type, the second flight of the second squadron with Pe-8-type aircraft, and the second flight of the third squadron with combat aircraft of the Tu-4 type.

SECRET/SECURITY INFORMATION

SECRET/SECURITY INFORMATION

- 24 -

There will be a total of 333 permanent personnel in the regiment of whom 69 will be officers and 264 will be sergeants and privates. Thus, the Air Institute for Long Range Aviation Navigators has a permanent personnel T/O of:

Permanent Officer Personnel	-	176
Permanent Enlisted Personnel	-	373
Permanent Civilian Personnel	-	83
Total		<u>632</u>

If the civilian personnel are not taken into account, this air institute will have a permanent military personnel total of 549 persons. There will be approximately 300 student personnel in this air institute. The Training groups will be composed of about 20-30 persons per group. The personnel of the groups are selected on the basis of the general development and training of the student personnel.

During the period of training, students may be expelled from the institute for various reasons such as: illness, failure to keep up with the work, etc. After students are expelled, they are sent to long range aviation combat units for their future service.

ANNOTATION: In contrast with an Air Institute for Frontal Aviation Navigators, this air institute does not have the following equipment:

1. Manuals on the combat functions of ground-attack aviation.
2. Charts showing the defensive organization from infantry squad to infantry battalion levels.
3. Manuals on the combat function of transport aviation.
4. Models of aircraft with chemical spray tanks.

Permanent Personnel T/O of an Air School for Mechanics

No	Duty Designation	Military Grade	No. of Pers
1.	Chief of the Air School for Mechanics	Engineer Col, Col	1
2.	Adjutant to the Chief of the School	Lt, Senior Lt	1
3.	School Chief of Staff	Lt Col, Col	1
4.	Chief of the School's Political Section, simultaneously the Chief of the School for Political Matters	Lt Col, Col	1
5.	Deputy Chief of the School for the Rear	Maj, Lt Col of the Quartermaster Service	1
6.	Chief of the School's Medical Service	Maj, Lt Col of the Medical Service	1
7.	Chief of the School's MGB Counter-Intelligence Section	Maj, Lt Col	1
8.	Chief of the School's Officer Personnel Section	Maj	1
9.	Assistant Chief of the School's Officer Personnel Section	Senior Lt, Capt	1
10.	Chief of the School's Training Section, simultaneously the School's Deputy Chief of Staff	Lt Col	1
11.	Chief of the School Communications	Maj, Lt Col	1
12.	Chief of the School's E M Personnel Section	Senior Lt, Capt of the Administrative Service	1
13.	Assistant Chief of the E M Personnel Section	Lt, Senior Lt of Administrative Sec	1
14.	Chief of the School's Secret Section	Senior Lt of the Administrative Service	1
15.	Chief of the School's 6th Section	Capt	1
16.	Assistant Chief of the School's 6th Section	Senior Lt	1
17.	Chief of the School's Dispensary	Maj of the Medical Service	1
18.	Investigator of the School's Counter-Intelligence Sec	Lt, Senior Lt, Capt	1
19.	Chief Clerk of the MGB Counter-Intelligence Sections Secret File-Typist (Both of these functions are usually handled by one female.)	Lt	1
20.	Chief of the School's Food Supply	Capt of the Quartermaster Service	1
21.	Assistant Chief of the School's Food Supply	Senior Lt, Capt of the Quartermaster Service	1
22.	Chief of the School's Financial Section	Capt of the Quartermaster Service	1
23.	Bookkeeper of the School's Financial Section	Senior Lt of the Quartermaster Service	1
24.	Cashier	Lt of the Quartermaster Service	1
25.	Chief of the School's Clothing and Equipment Supply	Capt of the Quartermaster Service	1
26.	Assistant Chief of the Clothing and Equipment Supply	Senior Lt of the Quartermaster Service	1
27.	Petroleum, Oil and Lubricants Chief	Senior Technical Lt	1
28.	Motor Vehicle Company Commander	Capt	1
29.	Assistant Commander of the Motor Vehicle Company for Technical Matters	Senior Technical Lt, Engineer	1
30.	Instructor of the School's Political Section for Propaganda and Agitation	Capt	1
31.	Therapeutic Physician	Capt, Maj of the Medical Service	1

SECRET/SECURITY INFORMATION

32.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Ser	1
33.	Assistant Chief of the School's Political Section for Komsomol	Senior Lt, Capt	1
34.	Motor Vehicle Platoon Commander	Lt, Senior Lt	1
35.	Communications Platoon Commander	Lt, Senior Lt	1
36.	Senior Instructor of the Political Section for Propaganda and Agitation	Maj	1
37.	Political Section Agitator	Capt, Maj	1
38.	Training Battalion Commander	Maj, Lt Col	2
39.	Battalion Senior Adjutant	Capt, Maj	2
40.	Training Company Commander	Senior Lt, Capt	4
41.	Training Platoon Commander	Lt, Senior Lt	8
42.	Deputy Commander of the Training Battalion for Political Matters	Maj, Lt Col	2
43.	Senior Tactics Training Instructor	Capt	1
44.	Tactics Training Instructor	Senior Lt, Capt	1
45.	Senior Instructor in Cold-Metal Working	Engineer Capt, Engineer Maj	1
46.	Instructor in Cold-Metal Working	Senior Technical Lt, Engineer Capt	2
47.	Chief of the Technical Training Cycle	Engineer Lt Col	1
48.	Senior Instructor in Aircraft Engines	Engineer Capt, Engineer Maj	1
49.	Instructor in Aircraft Engines	Senior Technical Lt, Engineer Capt	2
50.	Senior Instructor in Aircraft (Fuselage) Construction	Engineer Maj	1
51.	Instructor in Aircraft Construction	Engineer Capt, Engineer Maj	2
52.	Senior Instructor in Aircraft Aerial Armaments	Engineer Capt	1
53.	Instructor in Aerial Armaments	Engineer Capt	2
54.	Senior Instructor in Aircraft Special Equipment	Engineer Capt, Engineer Maj	1
55.	Instructor in Aircraft Special Equipment	Senior Technical Lt, Engineer Capt	2
56.	Senior Instructor of Metal Working	Engineer Capt, Engineer Maj	1
57.	Instructor in Metal-Working	Engineer Capt	2
58.	Senior Instructor in Lathe Operation	Engineer Capt, Engineer Maj	1
59.	Instructor in Lathe Operation	Engineer Capt	2
60.	Senior Physical Training and Sports Instructor	Capt	1
61.	Physical Training and Sports Instructor	Senior Lt	1
62.	Senior Chemical Training Instructor, simultaneously the Chief of the School's Chemical Service	Capt, Maj	1
63.	Chemical Training Instructor	Senior Lt, Capt	1
64.	Chief of the School's Residence Maintenance Sec	Lt, Senior Lt	1
65.	Military Topography Instructor	Lt, Senior Lt	1
66.	Senior Instructor in the Technology of Metals	Engineer Capt, Engineer Maj	1
67.	Instructor in the Technology of Metals	Engineer Capt, Capt of the Air Technical Service	1
68.	Senior Instructor in Aircraft Motor Repairs	Engineer Maj, Maj of the Air Technical Service	1
69.	Instructor in Aircraft Motor Repair	Engineer Capt, Capt of the Air Technical Service	1
70.	Instructors and Senior Instructors of Various Subjects Whose Designations I Cannot Recall	Senior Technical Lt through Engineer Maj Incl	10
T/O Officer Total			99

In addition to the above, I believe this school also has one flight of Liaison aircraft of the PO-2 type. Under this variant the number of officers in the school would be increased by the addition of the following positions:

1.	Commander of the Service (Khozyastvenny) Platoon	Senior Lt	1
2.	Flight Commander	Senior Lt	1
3.	Flight Technician	Senior Technical Lt	1
4.	Liaison Pilots	Lt	2
Total			5
Grand Total			104

<u>Enlisted Personnel</u>			
1.	Motion Picture Mechanic	Senior Sgt	1
2.	Clerk of the School's Headquarters and Other Service Positions	Sgt, Senior Sgt	8
3.	Aircraft Mechanics	Senior Sgt, Master Sgt	3
4.	Electrical Equipment Mechanic	Senior Sgt, Master Sgt	1
5.	Instrument Mechanic	Senior Sgt, Master Sgt	1
6.	Assistant Aircraft Mechanic	Sgt	3
7.	Drivers, Mechanics and Other Specialists of the Motor Vehicle Company	Pvt through Master Sgt Incl	35-40
8.	Personnel of the Communications Platoon	Pvt through Master Sgt Incl	20
9.	Personnel of the Service Platoon	Pvt through Sgt	12
The personnel in No 2 are also in this platoon, thus this platoon's strength is 20 persons.			
T/O Enlisted Total			89

Civilian Personnel

1.	Nurse	4
2.	Medical Assistant	3
3.	Typist	3
4.	Librarian	1
5.	Carpenter	1
6.	Metal Worker (Locksmith)	1
7.	Stoker	3
8.	Clean-up Woman	3
9.	Driver	4
10.	Manual Laborer	5
11.	Waitress	3
12.	Counter Helper	1
13.	Cook	3
14.	Dishwasher	3
15.	Storekeeper	3
16.	Accountant	4
17.	Electrician	1

T/O Civilian Personnel Total 46

Thus, the permanent personnel total for the school is:

Permanent Officer Personnel	104
Permanent Enlisted Personnel	89
Permanent Civilian Personnel	46

Total 239

If the civilian personnel are excluded, the remaining military personnel total for the school will be 193 persons.

There are two training battalions in this school which are equal to the battalions in an air technical institute in respect to their officer T/O.

The period of training at this school is two years. The number of students is approximately 200; the number in a group varies between 20 and 30 persons per group.

The training section of this school is equipped in the following manner:

1. A gunnery range which is equipped with targets for rifle fire.
2. Aircraft engines used for training students. (6)
3. Fuselages of various type aircraft (with engines removed) used for training students (6).
4. Boards to which are fastened parts of various engine components showing the complete arrangement of the components (10-15).
5. Charts showing sectional views of the structure of aircraft engines of different construction (10).
6. Charts showing the cooling system used on aircraft engines of various constructions (8).
7. Charts showing the operation of the oil system in aircraft engines of different construction (8).
8. Charts showing the fuel system in aircraft engines of various constructions (8).
9. Charts showing the defensive organizations at infantry squad and infantry platoon levels (4).
10. Boards to which instruments used for aircraft maintenance in the WVS of the Soviet Army are fastened (4).
11. Boards to which instruments located on aircraft instrument panels are fastened (2).
12. A machine shop which is equipped with two lathes, four metal working (locksmith) benches, four carpentry benches, two power drills, and other machines.
13. Wind tunnel (1) which is installed in the technical training class.
14. A secret library which is under the supervision of the Chief of the Secret Section. This library contains the following literature:
 - a. Manual dealing with the Engineering Air Service (20).
 - b. Instructions for the maintenance of various type aircraft under winter and summer conditions (50).
 - c. Garrison Service Regulations of the Peoples' Commissar of Defense of the USSR (30-35).
 - d. Unit internal subordination regulations of the Armed Forces of the USSR (35).
 - e. Disciplinary (Punishment) Service Regulations of the Armed Forces of the USSR (40).
 - f. Manual dealing with gunnery matters (25-30).
 - g. Mikulin's books on "Aircraft Engines".
 - h. Shulzhenko's books on "Aircraft Construction".
 - i. Books dealing with cold metal working (20).
 - j. Books dealing with production technology (25).
 - k. Infantry Combat Regulations, Parts I & II (30).
 - l. Field regulations of the Armed Forces of the USSR (5); however, only the officers in this school can use these regulations.
 - m. Aviation Combat Regulations of 1948 (5).
15. Posters showing sectional views of Soviet Army gas masks (1); instead of the poster, a board to which sectional cuts of gas masks are attached may be located in the chemical training class.

16. Posters showing different methods of anti-chemical defense used in the Soviet Army. These include: anti-mustard gas stockings, gloves, capes, cape-raincoats, individual first-aid packages, and other methods of anti-chemical defense which are necessary to safeguard personnel, animals and aircraft (10).
17. Charts showing the electrical system of aircraft (2-3).
18. Radio equipment from the different types of aircraft with which the Soviet Army is equipped(4).
19. Models and sectional cuts of models of rifles and sub-machine guns (6).
20. The equipment in the gymnasium and on the sports field of the school is the same as in the other air institutes shown above.

All of the above equipment refers primarily to an air school for aircraft maintenance mechanics since mechanics' schools are divided according to the various mechanics' specialties. Thus, each of these schools has more equipment which relates to the specialty of the student mechanics being trained there and less equipment dealing with the other specialties.

Permanent Personnel T/O of a Radio Operator/Gunner School

No	Duty Designation	Military Grade	No of Pers
1.	Chief of the Air School for Radio Operator/Gunner	Col	1
2.	School Chief of Staff	Lt Col, Col	1
3.	Chief of the School's Political Section, simultaneously the Deputy Chief of the School for Political Matters	Lt Col, Col	1
4.	Deputy Chief of the School for the Rear	Maj, Lt Col of the Quartermaster Service	1
5.	Chief of the School's Officer Personnel Section	Capt, Maj	1
6.	Assistant Chief of the School's Officer Personnel Section	Senior Lt, Senior Lt of the Administrative Service	1
7.	Chief of the School's EM Personnel Section	Capt of the Administrative Service	1
8.	Assistant Chief of the School's E M Personnel Section	Lt, Senior Lt of the Administrative Service	1
9.	Chief of the School's MIB Counter-Intelligence Section	Maj	1
10.	Chief of the School's Training Section, simultaneously the School's Deputy Chief of Staff	Lt Col	1
11.	Chief of the School's Medical Service	Maj, Lt Col of the Medical Service	1
12.	Chief of the School's Secret Section	Lt, Senior Lt of the Administrative Service	1
13.	Chief of the 6th Section	Capt	1
14.	Assistant Chief of the School's 6th Section	Senior Lt	1
15.	Investigator for the School's MIB Counter-Intelligence Section	Lt through Maj Incl	1
16.	Chief Clerk of the MIB Counter-Intelligence Section	Lt, Senior Lt	1
17.	Chief of the School's Food Supply	Capt of the Quartermaster Service	1
18.	Assistant Chief of the School's Food Supply	Senior Lt, Capt of the Quartermaster Service	1
19.	Chief of the School's Clothing and Equipment Section	Capt of the Quartermaster Service	1
20.	Assistant Chief of the School's Clothing and Equipment Supply	Senior Lt of the Quartermaster Service	1
21.	Chief of the School's Finance Section	Capt of the Quartermaster Service	1
22.	Cashier	Lt, Senior Lt	1
23.	Petroleum, Oil and Lubricants Chief	Senior Technical Lt	1
24.	Instructor of the Political Section for Propaganda and Agitation	Capt	1
25.	Deputy Chief of the School's Political Section	Maj, Lt Col	1
26.	Assistant Chief of the Political Section for Komsomol	Senior Lt, Capt	1
27.	Senior Instructor of the Political Section for Propaganda and Agitation	Maj	1
28.	Political Section Agitator	Capt	1
29.	Therapeutic Physician	Capt, Maj of the Medical Service	1
30.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
31.	Chief of the Club	Senior Lt, Capt	1
32.	Chief of the Library	Lt, Senior Lt	1
33.	Communications Platoon Commander	Lt, Senior Lt	1
34.	Motor Vehicle Company Commander	Capt	1
35.	Assistant Commander of the Motor Vehicle Company for Technical Matters	Senior Technical Lt, Engineer Capt	1
36.	Political Section Instructor for Party Records	Senior Lt, Capt	1
37.	Motor Vehicle Platoon Commanders	Lt, Senior Lt	2
38.	Training Battalion Commander	Maj, Lt Col	1
39.	Deputy Commander of the Training Battalion for Political Matters	Maj, Lt Col	2

SECRET/SECURITY INFORMATION

SECRET/SECURITY INFORMATION

- 28 -

40.	Battalion Senior Adjutant	Capt, Maj	2
41.	Training Company Commanders	Senior Lt, Capt	4
42.	Training Platoon Commanders	Lt, Senior Lt	8
43.	Senior Tactics Training Instructor	Capt	1
44.	Tactics Training Instructor	Senior Lt, Capt	1
45.	Senior Communications Instructor	Capt, Maj	1
46.	Communications Instructor	Senior Lt, Capt	3
47.	Senior Instructor for Aerial Armaments	Engineer Capt, Engineer Maj	1
48.	Instructor for Aerial Armaments	Senior Technical Lt, Engineer Capt	3
49.	Senior Instructor for Technical Training	Engineer Capt, Engineer Maj	1
50.	Technical Training Instructor	Senior Technical Lt, Engineer Capt	1
51.	Senior Instructor for Physical Training and Sports	Capt	1
52.	Instructor for Physical Training and Sports	Senior Lt	1
52A.	Adjutant to the Chief of the School	Capt, Maj	1
53.	Senior Instructor of Chemical Training, simultaneously the Chief of the School's Chemical Services	Capt, Maj	1
54.	Chemical Training Instructor	Senior Lt, Capt	1
55.	Chief of the Residence Maintenance Section of the School	Lt, Senior Lt	1
56.	Senior Instructor in Military Topography	Capt	1
57.	Military Topography Instructor	Senior Lt, Capt	1
58.	Service Platoon Commander	Lt, Senior Lt	1
59.	Communications Flight Commander	Senior Lt	1
60.	Liaison Flight Technician	Senior Technical Lt, Technical Lt	1
61.	Liaison Pilots	Jr Lt, through Senior Lt	2
62.	Chief of the School's Ammunition Supply	Senior Technical Lt	1
63.	Instructors in Other Subjects Whose Designation I Cannot Recall	Senior Tech Lt through Major Incl	10
T/O Officer Total			<hr/> 91

Enlisted Personnel

1.	Aircraft Mechanics	Senior Sgt, Master Sgt	3
2.	Electrical Equipment Mechanics	Senior Sgt, Master Sgt	1
3.	Armaments Mechanics	Senior Sgt, Master Sgt	1
4.	Instrument Mechanics	Senior Sgt, Master Sgt	1
5.	Assistant Aircraft Mechanics	Sgt	3
6.	Assistant Armaments Mechanics	Sgt	1
7.	Drivers, Mechanics and Other Specialties of the Motor Vehicle Company	Pvt through Master Sgt Incl	40
8.	Sgts and Pvts of the Communications Platoon	Pvt through Senior Sgt Incl	20
9.	Personnel of the Service Platoon	Pvt through Sgt	20
10.	Motion Picture Mechanic	Senior Sgt	<hr/> 1
T/O Enlisted Total			91

Civilian Personnel

1.	Accountant	5
2.	Nurse	4
3.	Medical Assistant	3
4.	Typist	4
5.	Storekeeper	3
6.	Clean-up Woman	3
7.	Waitress	3
8.	Cook	3
9.	Counter Assistant	1
10.	Metalworker (Locksmith)	1
11.	Carpenter	1
12.	Electrician	1
13.	Dishwasher	3
14.	Stoker	3
15.	Driver	4
16.	Manual Laborer	5
17.	Librarian	1

T/O Civilian Personnel Total		<hr/> 48
------------------------------	--	----------

Total permanent Personnel of the School:

Permanent Officer Personnel -	91
Permanent Enlisted Personnel -	91
Permanent Civilian Personnel -	<hr/> 48

Total

230

SECRET/SECURITY INFORMATION

The total for permanent military personnel (only the officers, sergeants, and privates) in this school is 181 persons.

This school is equipped with one flight of liaison aircraft of the Po-2 type; these aircraft are used to transport officer personnel from the school to the headquarters of the Military District and back again in accordance with instructions of the Chief of the School or the Chief of Staff. There are only three aircraft in this flight. In addition to the above mentioned function, this flight is occupied with the training of students in aerial gunnery. In the latter case, machine guns are installed in the turrets of two of the aircraft while the third aircraft pulls the sleeve target at which the students fire.

There is a total of approximately 200 students in this school; the number in each group varies from 20 to 30 persons (but never more than 30). The length of training in this school is two years. This school trains aerial gunners, radio operators for frontal and long range aviation since the latter does not have any special schools for training aerial gunners and radio operators of its own. The training section of this school is equipped in the following manner:

1. A gunnery range equipped with mobile and stationary targets, sighting mechanisms mounted on tripods, turrets with combat guns, and cabins with sighting mechanisms and combat arms used in training students in aerial gunnery. There are approximately 30 pieces of the above mentioned equipment.
2. Sighting mechanisms mounted on tripods; these are installed in the aerial gunnery training classes (10).
3. Turrets with sighting mechanisms and model guns of the type used on these turrets and in different types of aircraft (6); all of these are located in the aerial gunnery training classes.
4. Posters showing the structure of various types of gas masks used by humans and animals (dogs and horses) of the Armed Forces. The gas masks shown on the poster illustrate sectional views of the masks. There are approximately 2-4 such posters. Furthermore, there may be a board to which actual sectional cuts of combat gas masks of the type used in the Soviet Army at the present time, are fastened (1-2). All of this equipment will be located in the chemical training classes during class sessions.
5. Posters showing various anti-chemical defensive equipment. Such equipment includes the following: shelters, anti-mustard gas stockings, capes, raincoat capes, rubber gloves and boots, and individual first-aid packages (to be used on victims of an enemy's chemical attack) (10).
6. Charts showing the organization of washing and decontamination points used for personnel and aircraft (2).
7. Models of various aerial projectiles and cartridges including a marking giving their function (incendiaries, tracers, armor-piercing, etc.) (20-25). These are either fastened to a special board which hangs on the wall or to a table which is located in the aerial gunnery training classes.
8. Aerial cannons or machine guns which are mounted on stands or special tables; on these tables are instruments which are used in stripping and assembling these arms (6). All of this equipment is located in the aerial gunnery training classes.
9. Charts showing the defensive system at infantry squad and infantry platoon levels (4). These are permanently located in the tactics training classes.
10. Chart or posters showing how a target will appear at various distances through an aerial gunner's sight, and the distance at which it is advisable to open fire (4-8). These charts or posters are permanently located in the aerial gunnery training classes.
11. Posters showing topographical symbols which are used to represent localities and other objects on a map (2-4); these posters are permanently hung up in the tactics classes.
12. Tables on which Morse telegraph keys are installed. These are used in training students to receive and transmit by ear. There are approximately 70 Morse telegraph keys on these tables which are located in the communications classes.
13. Charts showing the ballistic characteristics of aerial weapons and ammunition (6); these are located in the aerial gunnery training classes.
14. Models and model sectional cuts of rifles and submachine guns (6).
15. Boards to which the parts of a stripped rifle and submachine gun are fastened (2); these boards may be located in the aerial gunnery training classes or in the corridors of the student's barracks.
16. Charts showing the construction of the radio receivers used on different type aircraft (4-6); these are also located in the communications classes.
17. Charts showing the construction of the radio transmitters used on different type aircraft (6-8); these are also located in the communications classes.
18. Radio receivers and radio transmitters which are located in the communications classes (8); all of these are in working order and may be used (i.e., they can be installed in aircraft and used at any time if it is necessary to do so).

SECRET/SECURITY INFORMATION

- 30 -

19. The antenna structures used with the above aircraft radio equipment (8); (there is one antenna structure for each radio receiver transmitter); these are also located in the communications classes.
20. Converters, generators, and other equipment required for the operation of the above mentioned radio equipment (8); these are located in the communications classes.
21. The equipment in the gymnasium and on the sports field in this school will be the same as that of the air institutes with the exception of the centrifuge which this school does not have.
22. Charts showing the theory of aerial gunnery (10); these are permanently located in the aerial gunnery training classes.
23. A Secret Library which is under the supervision of the Chief of the school's Secret Section. The library can be located in the same building with the school's headquarters, or it can be located in the main training building. The library contains the following literature:
 - (a) Colonel Envald's book on "The Theory of Aerial Gunnery" (50-100).
 - (b) Instructions on the maintenance of aerial weapons under winter and summer conditions (50).
 - (c) Manual dealing with gunnery matters (20-30).
 - (d) Manual dealing with the communications service (50).
 - (e) Garrison Service Regulations of the Peoples' Commissar of Defense of the USSR (30-35)
 - (f) Unit internal subordination regulations of the Armed Forces of the USSR.
 - (g) Disciplinary (punishment) Service Regulations of the Armed Forces of the USSR (40).
 - (h) Books dealing with the fundamentals of radio technology (40).
 - (i) Infantry Combat Regulations, 1st and 2nd parts (30).
 - (j) Field Regulations for the Armed Forces of the USSR (5 copies) only the officer personnel of this school are permitted to use these regulations.
 - (k) Aviation Combat Regulations of 1948 (5); these regulations are also used by the school's officer personnel only.
 - (l) High altitude training manual (15).
 - (m) Technical descriptions of contemporary types of arms and sighting mechanisms (10-20).
 - (n) Books dealing with military topography (20).
 - (o) Technical description of the "P-3" parachute (10).
 - (p) Various other books whose titles I cannot recall (100-150).

28. I have shown such duty designations as the Chief of the Meteorological Station and the Senior Meteorologist in the school for mechanics and the school for radio operator/gunners. The basis for doing so was the presence of a liaison flight at the school (which makes it possible for such duty slots to exist at the school). In order for any aircraft to receive permission to take-off, it has to have a weather bulletin and the only place such a bulletin can be obtained is a meteorological station. Since the meteorological station maintains a 24-hour weather surveillance, the Chief of the station has to have an assistant. Thus, if there is no T/O duty slot for a Senior Meteorologist at an AMS (Aero Meteorological Station), there will be one for a meteorologist (a sergeant). However, if there is a combat air unit based on the same airfield as the school's liaison flight, the school may not have an AMS since it can use the meteorological station of the separate Air Technical Battalion which is servicing the combat unit, or the two can work together. Thus, I cannot definitely state these positions exist at such schools.

29. I have omitted the following duty designations which exist at the air institutes for pilots and navigators and the school for aerial gunner-radio operators: A Senior Instructor of Parachute Training, simultaneously the Chief of the Institute's Parachute Landing Service (a Capt or Maj) and an Instructor of Parachute Training (a Senior Lt or Capt). I believe that these positions do exist because parachute training is absolutely essential for the students of the above institutes and school.

30. In contrast to the school for aircraft mechanics, the school for aerial gunners-radio operators has one armament mechanic and one assistant armament mechanic in its T/O because the students of the latter school receive aerial gunnery training at sleeve-targets; this means that the armament mechanic and his assistant have to check on ammunition expenditures, the condition of the weapons, and on the correctness with which the students use these arms. In addition to the above functions, these individuals have to check on the condition of the equipment at the gunnery range and the combat weapons used by students, as well as maintaining a record of ammunition expenditures on the gunnery range and in the air.

Permanent Personnel T/O of an Air Institute For Long Range
Aviation Pilots

Duty Designation	Military Grade	No of Pers
Chief of the Air Institute	Lt Gen of Aviation	1
Adjutant to the Chief of the Institute	Capt	1
Chief of Staff of the Institute	Maj Gen of Aviation	1
Chief of the Institute's Political Section, simultaneously the Deputy Chief of the Institute for Political Matters	Maj Gen of Aviation, Maj Gen	1

SECRET/SECURITY INFORMATION

SECRET/SECURITY INFORMATION

- 31 -

5.	Deputy Chief of the Institute for Drill Matters	Lt Col, Col	1
6.	Deputy Chief of the Institute for the Rear	Col of the Quartermaster Service	1
7.	Chief of the Institute's Officer Personnel Section	Col	1
8.	Assistant Chief of the Institute's Officer Personnel Sec	Maj, Lt Col	1
9.	Main Engineer of the Institute, simultaneously the Deputy Chief of the Institute for Engineering Air Service	Maj Gen of the Engineer Air Ser	1
10.	Main Navigator of the Institute	Col	1
11.	Chief of the Institute's MGB Counter-Intelligence Sec	Lt Col, Col	1
12.	Chief of the Institute's Medical Service	Col of the Medical Service	1
13.	Chief of the Institute's E M Personnel Section	Maj of the Administration Ser	1
14.	Assistant Chief of the Institute's E M Personnel Section	Senior Lt, Capt of the Admin Ser	1
15.	Chief of the Institute's Flight Training Section, simultaneously the Institute's Chief of Staff	Col	1
16.	Institute Chief of Communications	Lt Col	1
17.	Chief of the Institute's Finance Section	Maj of the Quartermaster Service	1
18.	Bookkeeper of the Institute's Finance Section	Capt of the Quartermaster Ser	1
19.	Chief of the Institute's 6th Section	Capt, Maj	1
20.	Assistant Chief of the Institute's 6th Section	Senior Lt	1
21.	Chief of the Institute's Food Supply	Maj of the Quartermaster Service	1
22.	Assistant Chief of the Institute's Food Supply, simultaneously the Chief of the Food Storehouse	Capt of the Quartermaster Service	1
23.	Chief of the Institute's Clothing and Equipment Supply	Maj of the Quartermaster Service	1
24.	Assistant Chief of the Institute's Clothing and Equipment Supply	Capt of the Quartermaster Service	1
25.	Petroleum, Oil and Lubricants Chief	Capt of the Air Technical Ser	1
26.	Chief of the Institute's Technical Supply	Capt of the Air Technical Ser	1
27.	Chief of the Institute's Ammunition Supply	Capt of the Air Technical Ser	1
28.	Motor Vehicle Company Commander	Capt	1
29.	Assistant Commander of the Motor Vehicle Company for Technical Matters	Senior Technical Lt, Engineer	1
30.	Motor Vehicle Platoon Commanders	Capt	3
31.	Chief of the Institute's Secret Section	Lt, Senior Lt	3
32.	Chief of the Institute's Meteorological Station	Senior Lt, Capt of the Administrative Service	1
33.	Chief Clerk of the MGB Counter-Intelligence Section	Engineer Capt, Engineer Maj	1
34.	Investigator of the MGB Counter-Intelligence Section	Lt, Senior Lt	1
35.	Senior Meteorologist	Lt through Maj Incl	2
36.	Chief of the Institute's Bombing Range	Senior Technical Lt	1
37.	Chief of the Tactics Training Cycle, simultaneously the Deputy Chief of the Flight Training Section	Lt Col	1
38.	Senior Tactics Training Instructor	Maj	1
39.	Tactics Training Instructor	Capt	2
40.	Senior Bombing Training Instructor	Maj	1
41.	Bombing Training Instructor	Capt	2
42.	Senior Instructor of Parachute-Landing Training, simultaneously the Chief of the Institute's Parachute Landing Service	Lt Col	1
43.	Parachute Landing Training Instructor	Capt, Maj	1
44.	Navigators' Training Senior Instructor	Maj	1
45.	Navigators' Training Instructor	Capt	2
46.	Senior Meteorological Training Instructor	Maj, Lt Col	1
47.	Meteorological Training Instructor	Capt, Maj	1
48.	Senior Chemical Training Instructor	Maj	1
49.	Chemical Training Instructor	Capt	1
50.	Senior Aerial Gunnery Training Instructor	Maj	1
51.	Aerial Gunnery Training Instructor	Capt	2
52.	Political Section Instructor for Party Records	Capt	1
53.	Chief of the Residence Maintenance Section	Capt, Maj	1
54.	Chief of the Air Institute's Dispensary	Maj, Lt Col of the Medical Ser	1
55.	Therapeutic Physician	Capt, Maj of the Medical Service	1
56.	Ear, Nose and Throat Physician	Capt, Maj of the Medical Service	1
57.	Chief of the Pharmacy	Senior Lt, Capt of the Medical Service	1
58.	Institute Engineer for Armaments	Engineer Lt Col	1
59.	Senior Communications Instructor	Maj	1
60.	Communications Instructor	Capt	1
61.	Senior Instructor of the Political Section for Propaganda and Agitation	Maj, Lt Col	1
62.	Instructor of the Political Section for Propaganda and Agitation	Capt	1
63.	Deputy Chief of the Political Section	Lt Col, Col	1
64.	Chief of the Technical Training Cycle	Engineer Col	1
65.	Senior Instructor of Technical Training	Engineer Maj	1
66.	Technical Training Instructor	Engineer Capt	2
67.	Senior Instructor of Military Topography	Capt, Maj	1
68.	Military Topography Instructor	Senior Lt, Capt	2
69.	Senior Instructor of Physical Training and Sports Instructor	Capt, Maj	1

SECRET/SECURITY INFORMATION

- 32 -

50X1

70.	Physical Training and Sports Instructor	Senior Lt, Capt	1
71.	Senior Instructor of Aerodynamics	Engineer Maj, Engineer Lt Col	1
72.	Aerodynamics Instructor	Engineer Capt, Engineer Maj	2
73.	Training Battalion Commander	Maj, Lt Col	1
74.	Training Company Commander	Senior Lt, Capt	2
75.	Institute Engineer for Special Equipment	Engineer Lt Col	1
76.	Commander of the Training Air Regiment	Col	2
77.	Chief of Staff of the Training Air Regiment	Lt Col, Col	2
78.	Deputy Commander of the Training Air Regiment for Political Matters	Lt Col, Col	2
79.	Deputy Chief of Staff of the Training Air Regiment	Maj, Lt Col	2
80.	Chief of Communications for the Training Air Regiment	Engineer Lt Col	2
81.	Senior Engineer of the Training Air Regiment	Engineer Lt Col	2
82.	Engineer of the Training Air Regiment for Armament	Engineer Maj	2
83.	Engineer of the Training Air Regiment for Special Equipment	Engineer Maj	2
84.	Chief of the Training Air Regiment's Chemical Service	Capt	2
85.	Squadron Commanders	Maj, Lt Col	4
86.	Flight Commanders	Senior Lt, Capt	4
87.	Pilot Instructors	Lt, Senior Lt	12
88.	Navigator of the Training Air Regiment	Maj	2
89.	Squadron Engineer	Engineer Capt, Engineer Maj	4
90.	Chief of Staff of the Squadron	Maj	4
91.	Squadron Senior Technician for Armament	Senior Technical Lt, Engineer Capt	4
92.	Squadron Senior Technician for Special Equipment	Senior Technical Lt, Engineer Capt	4
93.	Chief of the Training Air Regiment's Secret Section	Senior Lt, Capt of the Administrative Service	2
94.	Chief of the Training Air Regiment's Officer and E M Personnel Section	Capt	2
95.	Flight Technicians	Technical Lt, Senior Technical Lt	4
96.	Chief of the Club	Capt	1
97.	Senior Adjutant of the Battalion	Capt, Maj	1
98.	Commander of the Training Platoon	Lt, Senior Lt	4
99.	Commander of the Communications Platoon	Lt, Senior Lt	1
100.	Adjutant of the Political Section	Capt, Maj	1
101.	Chief of the Library	Lt, Senior Lt	1
102.	Squadron Navigator	Capt, Maj	4
103.	Flight Navigator	Senior Lt, Capt	4
104.	Crew Navigator	Lt, Senior Lt	12
105.	Flight Technicians (Borttekhavki)	Technical Lt, Senior Technical Lt	24
106.	Squadron Deputy Commanders	Capt, Maj	4
107.	Deputy Commander of the Training Battalion for Political Matters	Maj	1
T/O Officer Total			208

Enlisted Personnel

1.	Flight Mechanic (Bortmekhaniki)	Master Sgt	48
2.	Radio Mechanic	Senior Sgt, Master Sgt	4
3.	Instrument Mechanic	Senior Sgt, Master Sgt	4
4.	Electrical Equipment Mechanic	Senior Sgt, Master Sgt	4
5.	Armament Mechanic	Senior Sgt, Master Sgt	4
6.	Assistant Aircraft Mechanic	Senior Sgt, Master Sgt	-
7.	Assistant Armament Mechanic	Sgt	12
8.	Assistant Instrument Mechanic	Sgt	4
9.	Assistant Radio Mechanic	Sgt	4
10.	Assistant Electrical Equipment Mechanic	Sgt	4
11.	Radio Operator/Gunner	Senior Sgt	24
12.	Aerial Gunner	Sgt	-
13.	Motion Picture Mechanic	Senior Sgt	1
14.	Institute and Regimental Headquarters Clerks as well as Other Servicing Positions	Sgt, Senior Sgt	10
15.	Drivers, Mechanics and Other Specialists of the Motor Vehicle Company	Pvt through Senior Sgt	80
16.	Communications Platoon Personnel (Excluding Officers)	Pvt through Senior Sgt	30
T/O Enlisted Total			233

Civilian Personnel

1.	Nurse	4
2.	Medical Assistant	4
3.	Laboratory Technician	1
4.	Typist	6
5.	Dishwasher	6
6.	Clean-up Woman	4
7.	Telephone Operator	4
8.	Telegraph Operator	4
9.	Storekeeper	5
10.	Metalworker (locksmith)	1

SECRET/SECURITY INFORMATION

SECRET

SECRET/SECURITY INFORMATION

- 33 -

50X1

11. Carpenter	1
12. Waitress	6
13. Electrician	1
14. Accountant	6
15. Bookkeeper	2
16. Librarian	2
17. Stoker	5
18. Dining Room Supervisor	1
19. Counter Assistant	2
20. Driver	5
21. Manual Laborer	15

T/O Civilian Personnel Total 85

There permanent personnel in this institute number 526 persons. If the civilian personnel are excluded from this computation, the permanent military personnel in this institute will number 441 persons. The student personnel at this institute will number 300 persons and the training groups will have from 20 to 30 persons per group.

This air institute has one training battalion and two training air regiments. Each air regiment consists of two squadrons and each squadron is composed of two flights. Each flight has three aircraft. These training air regiments are equipped with such aircraft as the Il-4, Pe-8, Tu-4, Tu-70, and other types of aircraft assigned to the long range aviation air institutes for training purposes. There are twelve aircraft in each training air regiment.

There is a greater number of permanent military personnel in this air institute than in the air institute for frontal aviation bomber pilots, since this institute is equipped with more complicated aircraft.

The training section of this air institute is equipped in the following manner:

1. Wind Tunnels (4).
2. Link-Cabin Trainers (4-6).
3. Aircraft engines of various constructions used on long range aviation aircraft (2). These are mounted on wooden or metal stands in the technical training classes.
4. Cabins or semi-cabins in which radio compasses and radio semi-compasses are installed as well as other instruments required for their operation (2). This equipment is located in the aerial navigation classes.
5. Turrets with sighting mechanisms and model guns of the type actually used on long range aviation aircraft (4). These are located in the aerial gunnery training classes.
6. Combat weapons mounted on stands or tables which also contain an instrument for stripping and assembling them (6-8). These are located in the aerial gunnery training classes.
7. Pressure chamber (1) - located in a special building and used for the student's high altitude training.
8. Charts showing maneuvers to avoid enemy searchlight beams; these charts are permanently located in the tactics classes.
9. Manual dealing with the combat application of long range aviation (100-150 copies).

All of the remaining equipment in this air institute will be the same as in an institute for frontal bomber aviation pilots.

No	Duty Designation	Military Grade	No of Pers
..	Chief of the Aero Club	Maj, Lt Col	1
..	Chief of Staff of the Aero Club	Maj, Lt Col	1
..	Squadron Commanders	Capt, Senior Lt	2
..	Deputy Chief of the Aero Club for Flying Matters	Capt, Maj	1
..	Commanders of the Aero Club's Detachments (Flights)	Civilians	4-6
..	Squadron Technicians	Senior Technical Lt	2
..	Technicians of Detachments (Flights)	Civilians	4
..	Aircraft Mechanics	Civilians	20

This figure is not exact; it can vary depending on the number of aircraft.

Chief of the Aero Club's Training Section	Civilian	1
Driver	Civilian	6
Typist	Civilian	2
Bookkeeper	Civilian	1
Accountant	Civilian	1
Guard	Civilian	10-15
Expeditor (Supply Supervisor)	Civilian	1
Aero Club Engineer	Engineer Capt, Engineer Maj	1
Cashier	Civilian	1
Storekeeper	Civilian	1
Pilot Instructor	Civilian	6
Aero Club Physician	Capt of the Medical Service	1

SECRET/SECURITY INFORMATION

21. Nurse	Civilian	1
22. Clean-up Woman	Civilian	1
23. Stoker	Civilian	1
24. Instructor in the Parachuting Sport	Civilian	1
25. Aero Club Navigator	Civilian	1
26. Chief of Employment and Discharge	Civilian	1
27. Deputy Chief of the Aero Club for Political Matters	Maj, Lt Col	1
28. Chief of the Special Section	Lt of the Administrative Service	1

Aero Club T/O Total

75-82

The personnel total of an aero club consisting of two squadrons is:

Officers	11
Civilians	<u>64 - 71</u>
Total	75 - 82

The T/O of an aero club is composed of both military and civilian personnel. All of the aero club's supervisory positions are held by military personnel, and the less important positions by civilian personnel.

At present, every Oblast city, with the exception of Moscow, has one aero club. The number of squadrons vary, therefore, there is variance in the number of personnel at an aero club. The aero club can have several training groups. I do not know exactly how many. These training groups can be divided according to their designation, flight, parachute, and glider.

Primarily youths of seventeen will receive training in these groups without interruption to their occupations. This means that the whole theoretical course of study in an aero club is conducted in the evenings (after work) and the practical course is conducted on days of rest (Sundays).

50X1

The aero clubs are equipped with varied aircraft. The Mogilevskii Aero Club (the one with which I am familiar) had two squadrons equipped with the following types of aircraft: Po-2, Yak-11, Yak-3, Yak-9V, and Yak-9m. There was a total of about twenty aircraft in this aero club. I personally saw the above types of aircraft on the training area of the club and was informed of their number by a former mechanic

50X1

The training section of an aero club is equipped in the following manner:

1. An aircraft engine of the M-11 type mounted on a special stand in the technical training class (1).
2. An aircraft engine from an aircraft of obsolete-type construction which is still being used by the particular aero club (1); this engine is located in the technical training class.
3. Posters showing the cooling systems of the given engines (2).
4. The body of a Po-2 aircraft which is located indoors in a classroom or outdoors in a special area belonging to the aero club (1).
5. The body of the type of aircraft with which the aero club is equipped (1). This is installed in a special area of the aero club's yard.
6. Posters or charts showing the operation of the lubrication system of these aircraft engines (2). These are located in the technical training class.
7. Posters containing various appeals calculated to create an interest in aerial matters among the aero club's students (10).
8. Charts or posters showing the operating principles of the heating systems used in the aircraft engines to be studied in the given aero club (2-3).
9. Posters showing various elements of flight such as a take-off, a circular flight, a square flight (Postroyeniye Korobochki), a landing approach leveling out and a landing (10).
10. A model of an instrument panel and sectional cuts of instruments used on different type aircraft (1).
11. A wind tunnel (1). This is installed in the technical training class.
12. Posters showing the arrangement of a parachute (3).
13. A model of a navigator's ruler which is located in the aerial navigation class (1)
14. Posters giving excerpts from the manual on the execution of flights (3-4).
15. Posters showing the structure of a gas mask (2).
16. Poster showing storm characteristics and their influence on aircraft flights (1).
17. Poster showing different types of overcasts and their designation (1).
18. Boards to which component parts from engines to be used in the given aero club's training are fastened (2-3).
19. Manuals dealing with the execution of flights (4-5).
20. Charts or posters showing the aerodynamic characteristics of aircraft (3-4).
21. Books dealing with the study of aircraft motors of outdated construction, which include these motors with which the aero club's aircraft are equipped (30). These books are entitled "Aircraft Motors".
22. A model of a protractor (1) which is permanently located in the aerial navigation class.
23. Posters showing the activities of the city populace when an aerial and chemical alert are sounded (4). These posters may be located in the corridors of the building in which the aero club students receive their training.

50X1

SECRET/SECURITY INFORMATION

- 35 -

24. Picture posters showing the development of various aerial masses, their proximity characteristics, and the speed of their movement (4).
25. Poster showing the type of meteorological conditions under which the icing of aircraft occurs (1).
26. A table of topographical symbols which designate localities on a map (1). It will be located in the aerial navigation class.
27. The radio equipment which is used on the type of aircraft with which the aero club is equipped (1 set). This equipment is located in the technical class.
28. Charts showing the correct plotting of a course on a map and the type of computations which are jotted down along the course line (3). These charts are located in the aerial navigation class.
29. Poster showing the rules for selecting, posting together, and folding a map (1-2). These posters are located in the aerial navigation class.
30. Poster showing what a pilot must remember prior to getting into an aircraft (1). This poster is in the aerial navigation class.

About one-third of the aircraft at Mogilevskii Aero Club are Pe-2's and two-thirds are of the types which I mentioned above.

32. On the basis of pre-World War II information which I have about the Smolensk Aero Club (which trained students on Pe-2 aircraft and upon graduation provided them with certificates as pilots of Pe-2's, after which the students entered various air institutes for pilots). I believe that at present the students who are being trained as pilots in the aero clubs are still primarily being trained on Pe-2 aircraft. The combat and combat training aircraft are utilized for the purpose of maintaining the level of combat flight training on the part of the command personnel of the aero club and the reserve flight personnel who meet at the given aero club.
33. During the period of their training, all students in aero clubs are provided with flight clothing free of charge (such clothing includes: coveralls, crash-helmets, goggles, rulers, a plotting board, and a protractor) which they must return upon completion of their training at the aero club. The aero club also provides the students with free transportation from the class building to the airfield and back. For this purpose, the aero club has cars or buses to transport the students.

The duty designation "Chief of the Special Section" corresponds to the duty designation of Chief of the E M Personnel Section and Chief of the Secret Section of an air regiment.

Supplementary Data on Long Range Aviation

34. Upon graduating from a long range aviation air institute and being assigned to a unit, all pilots receive the position of co-pilot; these individuals serve as co-pilots for 2-3 years, and in some cases for longer periods. All of this depends on his degree of achievement in flight training and the presence of vacant "crew commander" positions.
35. Some of the officers graduating from an air institute for long range navigators are assigned to the position of crew navigator immediately upon arriving in a unit. These are the individuals who have completed the air institute with grades of excellent. The others are attached to more experienced crew navigators with whom they fly for 1-2 years or more depending upon their successes in navigation training. The above information is known to me from conversations with pilots of the long range aviation division stationed on the airfield at Orsila-Mogilev.

Furthermore, due to the contemporary-type aircraft which execute flights which are 24 hours long and more in duration, it is necessary to have two navigators on an aircraft. Consequently, the navigators who have just completed their training are assigned to the position of "second crew navigator".

- end -