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QUARTERLY ESTIMATE OF PRODUCTION OF AIRCRAFT
IN THE SINO-SOVIET BLOC
JULY - SEPTEMBER 1959

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FOREWORD

This publication is the eighteenth in a series issued on a quarterly basis summarizing production of aircraft in the Sino-Soviet Bloc. The estimates presented are issued to satisfy the requests of consumers for the most recent estimates of production of aircraft in the Bloc and are intended to supersede those estimates contained in previous publications of this Office. Differences between the present estimates and past estimates result from revised estimates of airframe weight and plant floorspace and from more recent intelligence information.

Although the over-all classification of this publication is TOP SECRET some of the pages are of a lower classification and are so designated.

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QUARTERLY ESTIMATE OF PRODUCTION OF AIRCRAFT
IN THE SINO-SOVIET BLOC*
JULY - SEPTEMBER 1959

1. Trends in Production

The two most noteworthy developments in production of aircraft in the Sino-Soviet Bloc during the third quarter of 1959 were the probable phase-out of known heavy bombers in the USSR and the anticipated production of a new aircraft.** The appearance of incomplete aircraft outside the plant building at Moscow/Fili Airframe Plant No. 23, site of production of the Bison (M-4) heavy jet bomber, indicates that production of the Bison is being phased out.*** The appearance of a new Soviet aircraft, possibly the Bounder, is anticipated at Plant No. 23 by November 1959.

It is believed that the Bear (Tu-95)**** heavy turboprop bomber was produced in relatively small numbers and that production ceased late in 1956 or early in 1957. Production of the Badger (Tu-16) medium jet bomber in the USSR is estimated to have ceased early in 1959.

As indicated in the last publication of this series, production of the Camel (Tu-104, Tu-104A) jet transport at Omsk Airframe Plant No. 166 and at Khar'kov Airframe Plant No. 135 apparently ceased early in 1959. Production of a larger version of this jet transport, designated Tu-104B, continues at Kazan' Airframe Plant No. 22. The USSR continues to emphasize the development and production of turbojet and turboprop transport aircraft. Along with the turbojet Tu-104B, five turboprop transports -- the Cleat (Tu-114), the Camp (An-8), the civil Cat (An-10), the military Cat (An-12), and the Coot (Il-18) -- are believed to be in series production in the USSR.

* The estimates and conclusions in this publication represent the best judgment of this Office as of 1 October 1959.

** Estimated production of aircraft in the Sino-Soviet Bloc from 1955 through the third quarter of 1959 is given by number in Table 1, p. 7, below, and by airframe weight in Table 2, p. 8, below. Estimated production of aircraft in the USSR from 1955 through the third quarter of 1959 is given by number in Table 3, p. 9, below, and by airframe weight in Table 4, p. 10, below. For comparative purposes, US military acceptance figures from 1955 through the third quarter of 1959 are given by number in Table 6, p. 13, below, and by airframe weight in Table 7, p. 14, below. For additional comparison, production of combat aircraft in the USSR from 1955 through September 1959, by number, is compared with that in the US in the chart, inside back cover.

*** For descriptions and illustrations of all Soviet aircraft mentioned in this publication, see the handbook listed in source 1/. (For serially numbered source references, see the Appendix.) Supplementary updating sheets have been added to this handbook.

**** Estimated cumulative production of selected Soviet aircraft, including the Bison, through the third quarter of 1959 is given in Table 5, p. 11, below. Estimates of monthly, quarterly, and cumulative production at selected plants in the Sino-Soviet Bloc are given in Table 10, p. 19, below.

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Production at the five airframe plants in the USSR which are concerned with new jet fighters remains relatively low, and none of the new fighter aircraft can be identified firmly as being in operational service. Of the fighters first observed in 1956, it appears most likely that improved versions of the Fishbed and Fitter jet interceptors will enter quantity production.

Test flights of a new Soviet aircraft, designated Be-10, were reported during the third quarter of 1959. These flights indicate the development of a new aircraft, probably designed as a replacement for the Madge (Be-6) reconnaissance aircraft. Taganrog Airframe Plant No. 49/86, production site of the Madge, probably is engaged in production of the Be-10.

The most important feature in production of aircraft in the Sino-Soviet Bloc outside the USSR was the apparent cancellation of the scheduled production of the Farmer (MIG-19) jet fighter in Czechoslovakia. Although Soviet-produced Farmer aircraft were assembled at the Prague/Vodochody Airframe Plant, the program for Czechoslovak production of the twin jet fighter apparently was dropped, whereas production of the Midget (U-MIG-15) jet trainer continues.

2. Production in the USSR

a. Bombers

Information received subsequent to the issuance of the last publication of this series indicates that at least 12 Bison aircraft were produced at Moscow/Fili Airframe Plant No. 23 during the first half of 1959. Production of Bison aircraft is estimated to have amounted to two in January, one in February, three in March, two in April, two in May, and two in June. Observations of Airframe Plant No. 23 during the third quarter of 1959 indicate that two Bison aircraft were produced in July, none in August, and one in September. Cumulative production of Bison aircraft at Plant No. 23 is estimated to have totaled 110 aircraft as of 1 October 1959. This estimate is believed to be reliable within plus or minus six aircraft.

There has been a significant change in the observations of Moscow/Fili Airframe Plant No. 23. Beginning on July 1959 and continuing in every observation since that date, incomplete as well as complete Bison aircraft have been seen outside the plant buildings. A report of an observation of Plant No. 23 on August 1959 describes a partly assembled aircraft which, from the description of the inboard wing panel, probably was not a Bison aircraft.

Before the initial observation of the Bounder aircraft at Moscow/Fili Airframe Plant No. 23 on August 1958, two incomplete Bison aircraft were seen in the plant area during June and July 1958. Bison fuselage sections were seen outside the plant buildings from May 1958 to at least October 1958.

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The increased surveillance and the appearance of incomplete aircraft outside the plant buildings are believed to indicate the approaching appearance of a new aircraft, possibly another Bounder, at Moscow/Fili Airframe Plant No. 23. This aircraft should appear by November 1959.

As many as five incomplete aircraft were seen at one time in the plant area during July. The existence of such a large number of incomplete aircraft outside the plant buildings is believed to indicate that the entire Bison production line is being cleared. Production of an experimental series of a new model, possibly the Bounder jet bomber, is believed to be underway.

b. Transports

As reported in the last publication of this series, it seems likely that production of the Camel (Tu-104, Tu-104A) turbojet transport has ceased at Khar'kov Airframe Plant No. 135 and at Omsk Airframe Plant No. 166.

The estimate of total production of the Tu-104 and Tu-104A should have been 110 rather than 115 aircraft. It appears that Omsk Airframe Plant No. 166 produced 65 Camel transports instead of the 70 previously estimated.

Production of the larger version of the Camel transport, the Tu-104B, continues at Kazan' Airframe Plant No. 22 at a faster rate than was previously estimated.

at least 45 of these aircraft were produced before 30 June 1959. On the basis of this information, the estimate of cumulative production of Tu-104B transports at this plant has been increased to 45 aircraft by the end of the second quarter and 60 aircraft by the end of the third quarter of 1959.

The estimate of production of the Coot (Il-18) four-engine turboprop transport at Moscow Airframe Plant No. 30 remains firm.

estimate that five aircraft per month are produced at this plant.

Analysis at
least 72 Cat aircraft had been produced at Voronezh Airframe Plant No. 64 before 9 September 1959.

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At least one Cat aircraft is known to be in Polar Aviation.* The remainder of the unlocated aircraft may be in Polar Aviation and/or the airborne forces, or they may appear later with Aeroflot registration numbers.

Production of the Cleat (Tu-114) turboprop transport is believed to be continuing at a rate of two aircraft per month at Kuybyshev Airframe Plant No. 18

it is difficult to pinpoint the place of production or the number of aircraft produced. On the basis of recent plant flight tests, Kuybyshev Airframe Plant No. 18 -- which produced the Bear (Tu-95) turboprop bomber and is believed to have produced the Tu-114D (a modified Bear transport) and Tu-114 prototypes -- is the most likely site for series production of Cleat aircraft.

Soviet officials recently announced that the Cleat turboprop transport is in series production, their claims concerning the number produced ranging from 4 to 25 aircraft. Actually only four Tu-114 and two Tu-114D transports have been observed. Of these transports the four Tu-114 aircraft were observed , parked at Moscow/Vnukovo Airport before Premier Khrushchev's departure for the US, 2/ and the two Tu-114D aircraft were observed during 1958. It is believed that 16 Tu-114 and 2 Tu-114D transports have been produced to date, that these aircraft are in various stages of flight testing, and that they are to enter Aeroflot service early in 1960.

One significant change has been incorporated in this estimate in the area of piston transports. The lack of sightings at Kiev Airframe Plant No. 473 as well as a Soviet reference to continued testing of Clod (An-14) aircraft indicate that quantity production of the An-14 transport was not undertaken as early as had been believed. The estimate of production, therefore, has been reduced sharply.

c. Fighters

Evidence during the third quarter of 1959 clarifies, in part, the status of programs for production of jet fighter aircraft in the USSR. This information serves to confirm the continued development of one jet fighter designed by A.I. Mikoyan and one, possibly two, jet fighters designed by P.O. Sukhoy.

Two airframe plants, Gor'kiy Airframe Plant No. 21 and Tbilisi Airframe Plant No. 31, are engaged in production of a jet fighter designed by Mikoyan and designated Article E-6. The new aircraft succeeds in production Article E-5, which had been equated with the Fishbed delta wing interceptor.

the Article E-6 fighter had considerably improved capabilities for performance in comparison with those of the Fishbed interceptor, inasmuch as the new fighter incorporates significant technical improvements. 3/

the two articles are similar: Article E-5 can be modified into Article E-6. 4/ Because both Plant No. 21 and Plant No. 31 are

* Upravleniye Polyarnoy Aviatsii -- Directorate of Polar Aviation.

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engaged in production of Article E-6, it is assumed that the fighter is scheduled for production. But there is no firm evidence to indicate large-scale production of this jet fighter, although its appearance in operational units is anticipated by the end of 1959.

The recent scheduling of four jet fighters with the flight designation Su-3 from the Komsomol'sk-Novosibirsk area indicates that a new fighter designed by Sukhoy also will enter operational units in the near future. 5/ Although the designation Su-3 has not been identified, it probably equates either to Fitter or Fishpot aircraft, both of which were sighted first in 1956, or to an as yet unknown jet fighter. confirmed production of Fitter aircraft at Komsomol'sk Airframe Plant No. 126.

The current status of production of Fishpot aircraft is obscure. It is known that Novosibirsk Airframe Plant No. 153 is involved in production of a jet fighter which was designed by Sukhoy. 6/ Because the Fishpot is the only fighter besides the Fitter known to have been designed by Sukhoy, Article PT has been tentatively equated with Fishpot aircraft. This fighter also may be entering or nearing operational service. There is no information as to the number of Article PT aircraft which have been produced, nor is any description available.

No new information is available concerning the Yak-27/29 all-weather fighter. Whereas an experimental series of the twin-jet interceptor is carried at Saratov Airframe Plant No. 292, the present status of its production is unknown.

d. Others

a new aircraft designed by G. M. Beriyeu is being flight tested in the Black Sea area. 7/ The new aircraft, designated Be-10, probably is intended as a replacement for the Madge (Be-6) flying boat. The Soviet press announced in 1957 that a jet-powered version of the Madge was under construction. It is believed that the Be-10 was produced at Taganrog Airframe Plant No. 49/86, which serves both for production and as a design bureau for Beriyeu.

3. Production in the European Satellites*

At the Prague/Vodochody Airframe Plant in Czechoslovakia the expected replacement in production of the Midget (U-MIG-15) by the Farmer (MIG-19) jet trainer has not occurred. Preparations to produce Farmer aircraft at Vodochody were started late in 1957, and a total of about 10 Farmer aircraft, probably assembled from Soviet parts, have been observed. Barring unusual difficulties, which are not to be expected for a second-source producer, the first Farmer

* Estimated production of aircraft in the European Satellites and in Communist China from 1955 through the third quarter of 1959 is given by number in Table 8, p. 15, below, and by airframe weight in Table 9, p. 17, below.

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aircraft produced in Czechoslovakia should have appeared in the second quarter of 1959. A recent sighting of the plant airfield

however, indicates that production of Midget aircraft is continuing and that production of bus trailers, which started in March 1959, also is continuing. 8/ The continued production of Midget aircraft also is confirmed by delivery flights of the jet trainer from Czechoslovakia. 9/

The estimate of production of the HC-2 helicopter has been revised in view of the lack of sightings, and an improved methodology for determining the productive capacity of the plant.

A study of Polish exports and a recent sighting indicate that production of the TS-8 "Bies" trainer probably has increased more rapidly than had been estimated, and the estimate of this production was changed accordingly.

The estimate of production of Fresco (MIG-17) jet fighters at Mielec in Poland has been revised for several reasons. First, unless several hundred Fresco aircraft were exported to the USSR or to Communist China, the estimate of production and the Air Order of Battle (AOB) had become totally incompatible. Second, a recent study indicates that, after allowances for production of small aircraft, gliders, automobiles, and refrigerators, there is considerably less area available for production of the Fresco than had been estimated.

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Estimated Production of Aircraft in the Sino-Soviet Bloc, by Number a/
1955 Through the Third Quarter of 1959

Type of Aircraft	Units						
	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Jet bomber							
Heavy	21	25	33	14	6	6	3
Medium	450	530	460	230	12	0	0
Light	790	330	130	0	0	0	0
Turboprop bomber							
Heavy	17	35	0	0	0	0	0
Jet fighter Transport	2,800	2,900	2,300 (2,400)	1,200 (1,400)	200 (270)	220 (270)	240
Jet							
Turboprop	4	14	27 (32)	74 (73)	23 (17)	18 (14)	15
Piston	0	3	17	100	59	70	79
Trainer	600	1,000	1,300	840 (780)	140 (160)	120 (170)	140
Jet							
Piston	1,100	550	420	340	75	75	45
Helicopter	560	600	520	570 (520)	140 (130)	150 (140)	150
Reconnaissance	350	360	470	710	190	190	200
Communication/utility	60	60	48	24	3	3	3
	68	140	220	290	56	51	47
Total	6,800	6,600	5,900 (6,200)	4,400 (4,500)	910 (960)	910 (980)	910

a. Figures are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates are explained in the text of this publication.

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Table 2
Estimated Production of Aircraft in the Sino-Soviet Bloc, by Weight a/
1955 Through the Third Quarter of 1959

Thousand Pounds of Airframe Weight							
Type of Aircraft	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Jet bomber							
Heavy	2,300	2,800	3,700	1,600	670	670	340
Medium	23,000	27,000	23,000	12,000	610	0	0
Light	14,000	6,000	2,300	0	0	0	0
Turboprop bomber							
Heavy	1,500	3,100	0	0	0	0	0
Jet fighter	22,000	25,000	20,000	10,000	1,800	1,900	2,100
Transport			(21,000)	(12,000)	(2,200)	(2,300)	
Jet	220	770	1,500	4,100	1,300	1,000	890
Turboprop	0	94	840	4,700	2,700	3,200	3,600
Piston	2,400	9,500	11,000	5,600	640	590	670
Trainer				(4,600)	(2,600)	(840)	
Jet	8,100	3,400	2,600	2,100	460	460	280
Piston	640	680	590	640	160	160	160
Helicopter	2,100	2,100	2,400	3,200	890	890	890
Reconnaissance	1,300	1,300	1,100	530	66	66	66
Communication/utility	73	150	240	320	60	55	51
Total	78,000	82,000	70,000	45,000	9,300	9,100	9,000

a. Figures include production of spare parts and are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates are explained in the text of this publication.

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Table 3

Estimated Production of Aircraft in the USSR, by Number a/
1955 Through the Third Quarter of 1959

Type of Aircraft	Units				
	1955	1956	1957	1958	1st Quarter of 1959
Jet bomber					2d Quarter of 1959
Heavy	21	25		14	6 (5) b/
Medium	450	530	33	230	12
Light	790	330	460	0	0
Turboprop bomber			130		0
Heavy	17	35	0	0	0
Jet fighter	2,400	2,600	2,200	860 (880)	0
Transport					130 (120)
Jet	4	14	(32)	73 (72)	17 (13)
Turboprop	0	3	17	100	70
Piston	600	1,000	1,200	680 (620)	73 (120)
Trainer					15
Jet	840	310	180	140	79
Piston	340	360	360	360	84
Helicopter	350	360	430	600	0
Reconnaissance	60	60	48	24	90
Total	5,900	5,600	5,000 (5,200)	3,100	160
					3
					580 (600)
					580

a. Figures are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates are explained in the text of this publication.

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Table 4

Estimated Production of Aircraft in the USSR, by Weight a/
1955 Through the Third Quarter of 1959

Thousand Pounds of Airframe Weight							
Type of Aircraft	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Jet bomber							
Heavy	2,300	2,800	3,700	1,600	670	(560) b/	340
Medium	23,000	27,000	23,000	12,000	610	0	0
Light	14,000	6,000	2,300	0	0	0	0
Turboprop bomber							
Heavy	1,500	3,100	0	0	0	0	0
Jet fighter	20,000	23,000	19,000	8,000	1,100	(1,200)	1,400
Transport							
Jet	220	770	1,500	4,100	1,300	(990)	890
Turboprop	0	94	840	4,700	2,700	(2,600)	3,600
Piston	2,400	9,200	10,000	3,600	140	(270)	140
Trainer							
Jet	6,700	2,000	1,100	830	180	180	0
Piston	400	430	430	430	110	110	110
Helicopter	2,100	2,100	2,300	3,000	820	820	820
Reconnaissance	1,300	1,300	1,100	530	66	66	66
Total	74,000	78,000	66,000	38,000	7,700	(7,200)	7,400

a. Figures include production of spare parts and are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates of weight reflect changes in estimates of the number of aircraft produced.

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Table 5
Estimated Cumulative Production of Selected Aircraft in the USSR a/
Through the Third Quarter of 1959

Type of Aircraft	Model	Production to 1 October 1959 a/	Status of Production	Units
Jet bomber				
Heavy	Bison (M-4)	110	Production continuing at a low rate	
Medium	Badger (Tu-16)	1,800	Production ceased	
Light	Bounder	2	Uncertain	
	Beagle (Il-28)	6,000	Production ceased	
Turboprop bomber				
Heavy	Bear (Tu-95)	55	Production ceased	
Jet fighter				
	Farmer (MiG-19)	3,600	Uncertain	
	Flashlight (Yak-25)	670	Production ceased	
	Fresco (MiG-17)	9,600	Production ceased	
	Fishbed	130	In production	
	Fitter	170	In production	
New jet fighters	Fishpot and other	140	Uncertain	
Jet transport				
Medium	Camel (Tu-104, 104A) (Tu-104B)	110 60	Production ceased In production	
Turboprop transport				
Heavy	Cleat (Tu-114) (Tu-114D)	16 2	In production Uncertain	
Medium	Camp (An-8) Civil Cat (An-10) Military Cat (An-12) Coot (Il-18)	56 89 84 83	In production In production In production In production	

a. Figures are rounded to two significant digits.

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Table 5

Estimated Cumulative Production of Selected Aircraft in the USSR
Through the Third Quarter of 1959
(Continued)

Type of Aircraft	Model	Production to 1 October 1959	Status of Production	Units
Piston transport				
Medium	Crate (Il-14)	1,200	Production ceased	
Light	Clod (An-14)	19	In production	
Helicopter				
Heavy	Horse (Yak-24)	41	In production	
Medium	Hound (Mi-4)	1,200	In production	

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Table 6

US Military Aircraft Acceptances, by Number a/
1955 Through the Third Quarter of 1959

Type of Aircraft	Units				
	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1958</u>	1st Quarter of 1959 2d Quarter of 1959 3d Quarter of 1959 b/
Bomber					
Heavy	34	75	173	156	19
Medium	530	505	199	31	5
Light	155	105	14	0	0
Ground attack	631	469	339	400	95
Fighter	4,017	2,656	2,569	1,574	202
Transport	536	362	223	337	46
Trainer	1,439	843	784	567	160
Other c/	701	1,098	1,316	1,174	241
Total	<u>8,043</u>	<u>6,113</u>	<u>5,617</u>	<u>4,239</u>	<u>768</u>
a. 10/					<u>870</u>
b. Including preliminary data for September 1959.					<u>705</u>
c. Tankers; helicopters; flying boats; and antisubmarine warfare, warning, liaison, utility, amphibian, and lighter-than-air aircraft.					

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Table 7

US Military Aircraft Acceptances, by Weight a/
1955 Through the Third Quarter of 1959

Type of Aircraft	Thousand Pounds of Airframe Weight						
	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959 b/
Bomber							
Heavy	3,853	8,442	19,462	17,638	2,101	3,752	3,537
Medium	26,377	22,525	7,340	1,250	160	192	128
Light	2,724	1,975	268	0	0	0	0
Ground attack	6,034	4,803	3,720	3,680	855	1,173	615
Fighter	43,161	30,588	30,427	18,562	2,578	3,809	3,002
Transport	20,697	13,104	9,319	8,134	925	1,284	977
Trainer	7,453	3,283	4,050	3,107	891	1,066	807
Other c/	4,397	5,292	4,853	13,758	4,193	4,217	3,598
Total	<u>114,696</u>	<u>90,012</u>	<u>79,439</u>	<u>66,129</u>	<u>11,703</u>	<u>15,493</u>	<u>12,664</u>

a. 11/

b. Including preliminary data for September 1959.

c. Tankers; helicopters; flying boats; and antisubmarine warfare, warning, liaison, utility, amphibian, and lighter-than-air aircraft.

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Table 8

Estimated Production of Aircraft in the European Satellites and in Communist China, by Number a/*
1955 Through the Third Quarter of 1959

Country	Type of Aircraft	Units						
		1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Czechoslovakia	Jet fighter	130	0	0	10	0	0	0
	Piston transport	0	17	46	60	15	15	15
	Jet trainer	240	240	240	200	45	45	45
	Piston trainer	120	120	6	0	0	0	0
	Helicopter	0	0	2	0	0	0	5
Total	Communication/ utility	68	140	220	290	56	51	47
		560	510	520	570	120	110	110
Poland	Jet fighter	240	340	130	180	45	45	45
	Piston transport	0	0	0	0	0	0	1
	Piston trainer	36	36	36	80	26	29	30
	Light helicopter	0	0	40	110	30	30	30
Total		270	380	210	370	100	100	110
Rumania	Piston trainer	24	24	45	69	18	18	18
Bulgaria	Piston trainer	20	36	36	20	0	0	0
Hungary	Piston trainer	24	30	36	37	9	9	9
East Germany	Jet transport	0	0	0	1	0	1	0
	Piston transport	0	2	19	41	9	9	9
Total		0	2	19	42	9	10	9

* Footnotes for Table 8 follow on p. 16.

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Table 8

Estimated Production of Aircraft in the European Satellites and in Communist China, by Number a/
1955 Through the Third Quarter of 1959
(Continued)

Country	Type of Aircraft	Units				
		1955	1956	1957	1958	1st Quarter of 1959
Communist China	Jet fighter	0	0	1	120	46
	Piston transport	0	0	1	56	24
Total		0	0	2	180	70
Grand total		900	980	860 (970)	1,300 (1,400)	320 (360)
						330 (380)
						78
						330
						48
						27
						30
						78
						330
						330

a. Figures are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates are explained in the text of this publication.

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Table 9

Estimated Production of Aircraft in the European Satellites and in Communist China, by Weight a/*
1955 Through the Third Quarter of 1959

Thousand Pounds of Airframe Weight								
Country	Type of Aircraft	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Czechoslovakia	Jet fighter	760	0	0	96	0	0	0
	Piston transport	0	290	800	1,000	260	260	260
	Jet trainer	1,500	1,500	1,500	1,300	280	280	280
	Piston trainer	130	120	6	0	0	0	0
	Helicopter	0	0	1	0	0	0	0
Total	Communication/ utility	73	150	240	(0)	(7)	(5)	(8)
		2,400	2,000	2,500	2,700	600	590	590
								51
Poland	Jet fighter	1,400	2,000	980	1,300	340	340	340
	Piston transport	0	0	0	0	0	0	4
	Piston trainer	35	35	35	78	25	28	29
	Light helicopter	0	0	92	260	69	69	69
		1,500	2,100	1,100	1,700	430	430	440
Total								
Rumania	Piston trainer	23	23	43	66	17	17	17
	Piston trainer	19	34	34	19	0	0	0
	Piston trainer	26	32	39	40	10	10	10
East Germany	Jet transport	0	0	0	43	0	43	0
	Piston transport	0	35	330	710	160	160	160
Total		0	35	330	750	160	200	160

* Footnotes for Table 9 follow on p. 18.

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Table 9

Estimated Production of Aircraft in the European Satellites and in Communist China, by Weight a/
1955 Through the Third Quarter of 1959
(Continued)

Thousand Pounds of Airframe Weight								
Country	Type of Aircraft	1955	1956	1957	1958	1st Quarter of 1959	2d Quarter of 1959	3d Quarter of 1959
Communist China	Jet fighter	0	0	7	890	340	360	360
	Piston transport	0	0	4	210	90	100	110
Total		0	0	11	1,100	430	460	470
Grand total		4,000	4,200	4,100	6,400	1,600	1,700	1,700
				(4,800)	(7,700)	(2,000)	(2,100)	

a. Figures include production of spare parts and are rounded to two significant digits. Totals are derived from unrounded figures and do not always agree with the sums of the rounded components.

b. Numbers in parentheses represent estimates presented in the last publication of this series. Revisions in the estimates of weight reflect changes in estimates of the number of aircraft produced.

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Estimated Production of Aircraft in Selected Plants in the Sino-Soviet Bloc, by Number
as of the Third Quarter of 1959

Country		Type of Aircraft	Model	Airframe Plant	September Production	Quarterly Production	Cumulative Production a/	Units	Remarks
USSR	Jet bomber	Heavy	Bison (M-4)	Moscow No. 23	1	3	110		Production of the Bison is believed to be ceasing. Production of an experimental series of a new model, possibly the Boudier, is believed to be underway.
			Boudier	Moscow No. 23	0	0	2		
		Medium	Badger (Tu-16)	Kuybyshev No. 1	0	0	690		Production ceased in the first quarter of 1959.
			Badger (Tu-16)	Kazan' No. 22	0	0	920		Production ceased in December 1958.
	Turboprop bomber	Badger (Tu-16)	Voronezh No. 64		0	0	220		Production ceased early in 1958.
		Heavy	Bear (Tu-95)	Kuybyshev No. 18	0	0	55		Series production is believed to have ceased in the fourth quarter of 1956.
		Jet fighter	Farmer (MIG-19)	Gor'kiy No. 21	0	0	1,400		Improved version of the Fishbed.
			Article E-6	Gor'kiy No. 21	4	10	27		
			Fresco (MIG-17)	Tbilisi No. 31	0	0	1,700		Improved version of the Fishbed.
			Article E-6	Tbilisi No. 31	8	23	100		
			Fitter	Komsomol'sk No. 126	14	40	170		
			Farmer (MIG-19)	Novosibirsk No. 153	10	30	2,200		Probably phasing out.
			Article PT	Novosibirsk No. 153	9	26	60		Possibly Fishpot.
			Yak-27	Saratov No. 292	5	15	77		

a. Unless otherwise indicated, figures for cumulative production are rounded to two significant digits and include all production through the third quarter of 1959.

Table 10

Estimated Production of Aircraft in Selected Plants in the Sino-Soviet Bloc, by Number
as of the Third Quarter of 1959
(Continued)

Country	Type of Aircraft	Model	Airframe Plant	September Production	Quarterly Production	Cumulative Production	Remarks	Units
USSR (Continued)	Transport							
	Jet	Camel (Tu-104) (Tu-104B)	Kazan' No. 22	0	0	3		
		Camel (Tu-104 and Tu-104A)	Khar'kov No. 135	5	15	60		
		Camel (Tu-104 and Tu-104A)	Omsk No. 166	0	0	45		
				0	0	65	Production ceased in the second quarter of 1959. Production ceased in the first quarter of 1959.	
	Turboprop	Cleat (Tu-114 and Tu-114P)	Kuybyshev No. 18	0	0	2		
		Camp (An-8)	Tashkent No. 84	6	19	51		
		Civil Cat (An-10)	Voronezh No. 64	8	23	84		
		Military Cat (An-12)	Irkutsk No. 39	6	17	84		
		Coot (IL-18)	Moscow No. 30	5	14	83		
	Piston	Creek (Yak-12)	Leningrad No. 458	24	72	1,200		
		Colt (An-2)	Kiev No. 473	0	0	1,800		
		Clod (An-14)	Kiev No. 473	7	12	19		
	Trainer							
	Jet	Midget (U-MIG-15)	Ulan-Ude No. 99	0	0	2,400	Production ceased in the second quarter of 1959.	
	Piston	Max (Yak-18)	Semenovka No. 116	30	90	5,400		
	Helicopter	Hound (M1-4)	Kazan' No. 387	15	45	860		
		Horse (Yak-24)	Leningrad No. 272	2	6	41		

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Table 10

Estimated Production of Aircraft in Selected Plants in the Sino-Soviet Bloc, by Number
as of the Third Quarter of 1959
(Continued)

Country	Type of Aircraft	Model	Airframe Plant	September Production	Quarterly Production	Cumulative Production	Remarks	Units
USSR	Helicopter (Continued)	Hare (Mi-1)	Rostov No. 168	16	48	320		
		Hare (Mi-1)	Chkalov No. 47	15	45	920		
	Seaplane	Hen (Ka-15)	Ulan-Ude No. 99	6	18	170		
		Madge (Be-6)	Taganrog No. 49/86	1	3	330		
Czechoslovakia	Jet fighter	Farmer (MiG-19 type)	Vodochody	0	0	10	Assembled from Soviet parts. Series production probably has been canceled.	
	Piston transport	Grate (Il-14)	Cakovice	5	15	170		
	Jet trainer	Midget (U-MiG-15)	Vodochody	15	45	1,100		
	Helicopter	HC-2	Otrokovice	5	15	20		
Poland	Other	Aero-45	Kunovice	3	10	550	Possibly will be replaced by the L-200. Cumulative figure in- cludes 200 produced at Vysocany Aero 1949-51.	
	Jet fighter	L-200	Kunovice	3	7	15		
	Piston transport	L-60	Chocen "Orlican"	3	9	220		
	Trainer	L-40	Chocen "Orlican"	3	9	50		
USSR	Jet fighter	Fresco (MiG-17)	Mielec	15	45	460		
	Piston transport	MD-12	Okecie	0	1	1		
	Trainer							
	Jet	TS-11	Mielec	0	0	0	Prototype scheduled to fly late in 1959 or early in 1960. Including six prototypes produced at Okecie.	
USSR	Piston	TS-8	Mielec	10	30	180		
		PSL-101	Okecie	0	0	2		
		PZL-102	Okecie	0	0	1		
	Helicopter	SM-1	Lublin/Swidnik	10	30	240	Series production scheduled to start late in 1959 at Mielec.	

Table 10

Estimated Production of Aircraft in Selected Plants in the Sino-Soviet Bloc, by Number
as of the Third Quarter of 1959
(Continued)

Country	Type of Aircraft	Model	Airframe Plant	September Production	Quarterly Production	Cumulative Production	Remarks	Units
Rumania	Piston trainer	IAR-813 IAR-817 RG-6	Stalin	1	3	150		
			Reghin	1	3	32		
Bulgaria	Piston trainer	LAZ series	Lovech	0	0	110	Production of airplanes has ceased at this plant.	
Hungary	Piston trainer	Max (Yak-18)	Esztergom	3	3	140	No recent information. Production may have ceased.	
East Germany	Jet transport Piston transport	"Type 152" Crate (TL-14)	Dresden/Klotzsche Dresden/Klotzsche	0 3	0 9	2 89	Production will cease in the fourth quarter of 1959.	
Communist China	Jet fighter Piston transport	Fresco (MIG-17) Colt (An-2)	Shen-yang No. 112 Nan-chang No. 320	16 10	48 30	260 140		

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APPENDIX

SOURCE REFERENCES

Evaluations, following the classification entry and designated "Eval.," have the following significance:

<u>Source of Information</u>	<u>Information</u>
Doc. - Documentary	1 - Confirmed by other sources
A - Completely reliable	2 - Probably true
B - Usually reliable	3 - Possibly true
C - Fairly reliable	4 - Doubtful
D - Not usually reliable	5 - Probably false
E - Not reliable	6 - Cannot be judged
F - Cannot be judged	

"Documentary" refers to original documents of foreign governments and organizations; copies or translations of such documents by a staff officer; or information extracted from such documents by a staff officer, all of which may carry the field evaluation "Documentary."

Evaluations not otherwise designated are those appearing on the cited document; those designated "RR" are by the author of this publication. No "RR" evaluation is given when the author agrees with the evaluation on the cited document.

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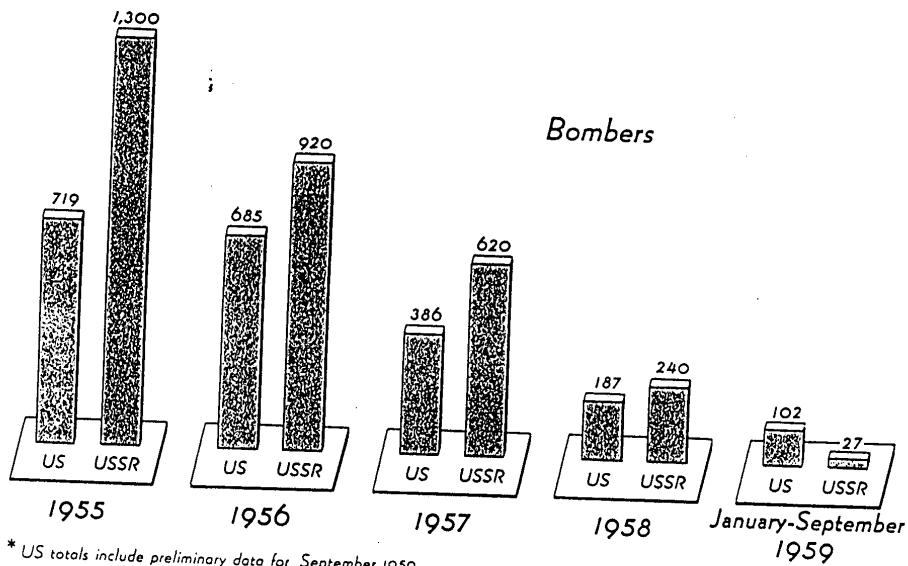
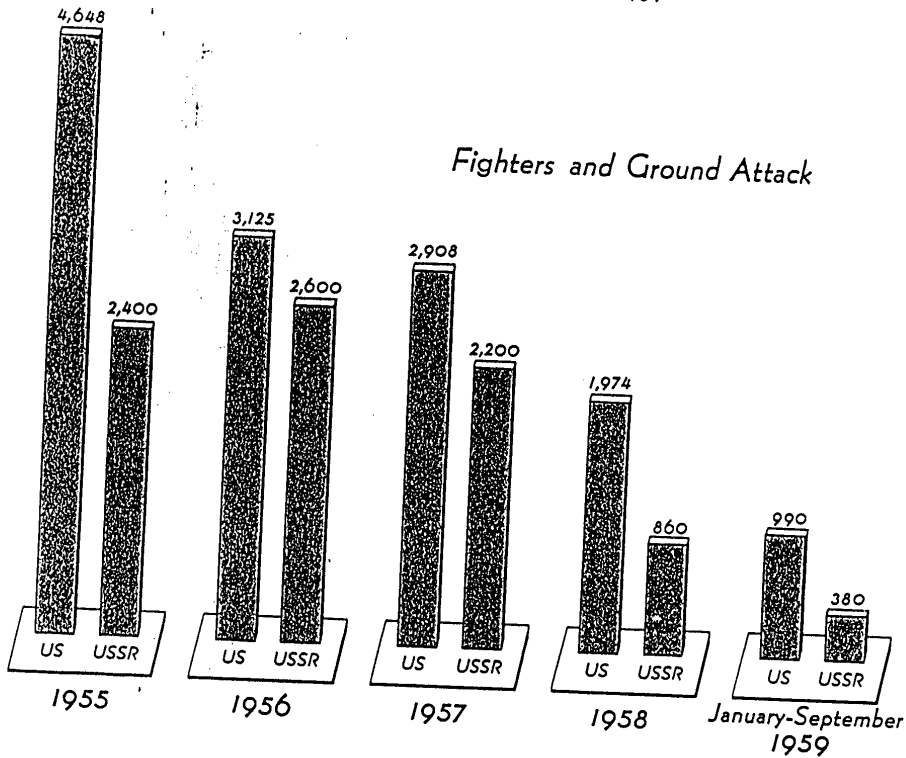
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US* and USSR**

PRODUCTION OF COMBAT AIRCRAFT, BY NUMBER
1955 Through the Third Quarter of 1959



* US totals include preliminary data for September 1959.

** USSR totals are rounded.

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