

1958

## The Soviet Role in International Civil Aviation

Hans Jr. Heymann

Follow this and additional works at: <https://scholar.smu.edu/jalc>

---

### Recommended Citation

Hans Jr. Heymann, *The Soviet Role in International Civil Aviation*, 25 J. AIR L. & COM. 265 (1958)  
<https://scholar.smu.edu/jalc/vol25/iss3/2>

This Article is brought to you for free and open access by the Law Journals at SMU Scholar. It has been accepted for inclusion in Journal of Air Law and Commerce by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

# THE SOVIET ROLE IN INTERNATIONAL CIVIL AVIATION\*

BY HANS HEYMANN, JR.

Senior Research Staff Member, The Rand Corporation

UNTIL quite recently, Western travelers who had occasion to use the services of the Soviet civil airline *Aeroflot* were notably unimpressed by if not downright scornful of the operational procedures and levels of technology displayed by the Russians in this field. At its best, the Soviet air-transport system seemed austere and undistinguished; at its worst, it looked like an ambitious kind of national barnstorming operation rather than a modern airline. It was evidently a low-priority Soviet activity that had been allowed to languish too long in technical isolation and economic neglect, and that had been left virtually untouched by the vast development of global air communication that had taken place in the Western world.

In the last 2 or 3 years, however, the Soviet leaders suddenly appear to have discovered the usefulness of civil aviation as an instrument of foreign policy, both in the political and in the economic sphere. The airplane has begun to figure more and more importantly in the Soviet foreign economic offensive, as a symbol of the new Soviet modernism in technology and benevolence in diplomacy. As a result of a fairly modest but exceedingly well-directed effort over the last few years, Soviet aviation has managed very effectively to obscure the fact of its over-all backwardness, and to convey to the outside world a most impressive image of itself as a serious and powerful contender in the international air-transport field. Though still essentially representing the DC-3 age of aviation, the Soviet Union can now lay claim to being the only country in the world that operates jet-transport services on domestic and international routes, and to flying, at least in prototype, the world's largest airliner. Though still confining its operations largely within the Communist Bloc, *Aeroflot* is now taken seriously when it talks ambitiously of extending its services to the four corners of the earth.

The "New Look" in Soviet aviation is being received in the West with a mixture of fascination and concern. The international aviation press has begun to follow closely the burgeoning activities of *Aeroflot* and to regard Soviet air transportation respectfully as "a force to be reckoned with." The British Minister of Supply, in a recent speech, found it necessary to warn Western aircraft manufacturers that Soviet competition in the export sale of aircraft soon may be "a very serious matter indeed." Western embassies in the Middle East and Southeast

---

\* A research report published here with the permission of The RAND Corporation, an independent non-profit organization devoted to scientific research in the interest of the national security and welfare of the United States.

Asia are expressing alarm at the prospect of Soviet aviation "penetration" into the under-developed countries, with its much-vaunted opportunities for espionage, subversion, and assorted political mischief; and the view is widely held that the Russians are now embarked on a vast program of global air-transport expansion that is designed to undermine our own aviation leadership.

How warranted are these fears and how realistic these predictions? Is the Soviet Union in fact able to challenge the West in the air-transport field and does it intend to do so? Or are there perhaps broader political ambitions and objectives that explain the new Soviet interest in civil aviation? This report attempts to answer these questions. Specifically, it examines the problem from two points of view: (1) From the point of view of aviation equipment, what do the recent development trends in the USSR tell us about the Soviet ability to compete technologically or economically in this field? And (2) from the point of view of international air routes, how serious are their ambitions, and how promising their opportunities, for developing a global air-transport network?

### SOVIET EQUIPMENT

It may be helpful to divide the development of civil aircraft in the Soviet Union into three distinct stages. These stages will be described briefly and will be illustrated with tables comparing present and future Soviet civil aircraft with equipment now in use or on order in the West.

#### STAGE I

The first stage might be called "Lingering Obsolescence," because it characterizes the severe handicap under which Soviet civil aviation still operates today. Because of long neglect, the Soviet Union finds itself still very much in the DC-3 era of aviation, suffering from obsolete aircraft, primitive airfields, and grossly inefficient operating techniques.

This obsolescence becomes immediately apparent when we look at the types of piston aircraft that today constitute the backbone of the Soviet passenger-transport inventory, as shown in the first part of Table I. The LI-2, which is in fact the DC-3 manufactured by the

TABLE I  
LINGERING OBSOLESCENCE

A. EVOLUTION		
Year into Service	Soviet Aircraft	Nearest Western Counterpart
	<i>Twin-engine Piston Aircraft</i>	
1940	LI-2 ( <i>Lisunov</i> )	Douglas DC-3
1947	IL-12 ( <i>Ilyushin</i> )	} Martin 202/404 Convair 240/340
1954	IL-14	
1957	IL-14M	

## B. PERFORMANCE

Specifications	Soviet Aircraft	Nearest Western Counterpart
	<i>IL-14/14M</i>	<i>Convair 340/440</i>
Date into service	1954/1957	1952/1956
Gross weight, lb.	36,300/38,000	47,000/49,100
Number of seats	18/26	44/52
Best cruise speed, kn	165	247
Maximum payload range, n mi	1560	1000/2000
Price quoted (excluding spares)	\$280,000	\$750,000

Russians under license from Douglas, and the IL-12 and 14, both obsolescent and highly uneconomical to operate, constitute together about 85 per cent of the passenger-carrying capacity of *Aeroflot*. Interestingly enough, the IL-14, in slightly modified forms, is now in production in substantial numbers in Czechoslovakia (*Aero-14*) and in East Germany (*ILGA-14*).

In the second part of Table I, the performance of the IL-14 is compared with that of our own Convair. The differences are striking, indeed:

The IL-14 has an exceedingly low ratio of payload to gross weight; that is, it takes 2000 to 3000 pounds of aircraft to carry a single passenger. The Convair weighs only 1000 pounds per passenger carried. Lack of weight control, leading to costly inefficiency, has been a chronic defect in all Soviet civil aircraft now in regular service.

The Convair has about a 50 per cent higher cruising speed than the IL-14, which means that the work capacity of the Soviet airplane is much inferior on that account also.

Small wonder that when the Russians offered this airplane for sale to India in 1956, the Indian government, after taking a good look at the operating economics, felt that it had to turn the deal down, in spite of the attractive price quoted by the Russians.

So much for Stage 1, the lingering obsolescence with which Soviet aviation is still burdened.

## STAGE 2

Stage 2 might be called "Hasty Transition." Note from Table II that the Russians have simply skipped the entire generation of four-engine piston airplanes that have played such an enormously important role in our own air-transport development over the last 15 years.

In an effort to overtake the West, and perhaps even surpass us, the Russians took a long and somewhat incongruous leap directly into the jet age, in the shape of the by now famous TU-104.

How successful was this hasty transition? Well, the TU-104 has won half a dozen world records; the Soviet Union can claim the distinction of being the only country in the world that operates jet transports in

TABLE II  
HASTY TRANSITION

A. EVOLUTION		
Year into Service	Soviet Aircraft	Nearest Western Counterpart
<i>Four-engine Piston Aircraft</i>		
1946-1956	NONE	DC-4, DC-6, DC-7 series Lockheed <i>Constellations</i> Boeing <i>Stratocruisers</i>
<i>Twin-engine Jet Aircraft</i>		
1956	TU-104	} <i>Caravelle</i> (Sud Aviation)
1957	TU-104A	
B. PERFORMANCE		
Specifications	Soviet Aircraft	Nearest Western Counterpart
	<i>TU-104/104A</i>	<i>Caravelle</i>
Date into service	1956/1957	1958
Gross weight, lb.	150,000	94,800
Number of seats	50/70	64/80
Powerplant thrust	(2) turbojets, 19,000 lb.	(2) turbojets, 10,500 lb.
Best cruise speed, kn	460	425
Maximum payload range, n mi	1400/1700	1400/1650
Price quoted (excluding spares)	\$1,190,000	\$1,950,000

regular service; and, most important, the Soviet leadership has been able to chalk up some impressive propaganda victories.

But in terms of any sensible standards of air-transport economics, the TU-104 simply does not qualify as a commercial transport. It is merely a clever improvisation, a hasty adaptation of a medium bomber to civil purposes. In converting his TU-16 bomber into a transport, Tupolev conveniently retained the bomber wing, the tail assembly, the engines and the landing gear and simply redesigned the fuselage to carry passengers rather than bombs. We could have done precisely the same thing 5 years earlier to our Boeing B-47, and it would have made just as little economic sense.

By way of illustration, the performance of the TU-104 is compared with that of its closest Western counterpart, the French *Caravelle*. Again we find that the Soviet airplane is very heavy relative to its payload and range capabilities. It is more than 50 per cent heavier than the *Caravelle* but carries a smaller payload over roughly the same distances. Its sole advantage is speed, and this is certainly worth something; but it is achieved through the use of phenomenally large engines with voracious appetites for fuel. Scandinavian Airlines, mostly out of curiosity, sent a team of engineers to Moscow to look over the airplane. They came back convinced that even if the Russians gave the TU-104's away for free, a commercial airline could not afford to operate them.

So far, this appraisal of Soviet equipment has been harshly negative: the aircraft now in operation in the USSR will simply not stand up to a rigorous commercial comparison with their counterparts in the West.

### STAGE 3

An appropriate name for Stage 3 might be "Impending Competition." The new Soviet prototypes that are to go into service in the near future (see Table III) present a very different picture. In fact, it seems that they constitute an entirely new generation of technically and economically attractive Soviet aircraft.

In the first place, out of the four new Soviet models, three are powered by turboprops, a form of powerplant on which the Russians have worked very hard while the United States has been sitting on its hands. From what we know about Soviet turboprop developments, we have every reason to expect some highly reliable and efficient powerplants in these airplanes.

Moreover, these airplanes can no longer be called hasty adaptations of military models to civil use. The *Ukraina*, for example, seems to be an intelligent compromise between a military transport and a passenger aircraft, while the *Moskva* is obviously newly designed as a purely civil airliner from the ground up.

TABLE III  
IMPENDING COMPETITION

A. EVOLUTION		
Year into Service	Soviet Aircraft	Nearest Western Counterpart
<i>Four-engine Jet Aircraft</i>		
1958	TU-110	Comet 4 (de Havilland)
<i>Four-engine Turboprop Aircraft</i>		
1958	AN10 ( <i>Ukraina</i> )	Lockheed <i>Electra</i>
1958	IL-18 ( <i>Moskva</i> )	Vickers <i>Vanguard</i>
1959	TU-114 ( <i>Rossia</i> )	{ Bristol <i>Britannia</i> / <i>Orion</i> Douglas DC-10/DC-7D
B. PERFORMANCE		
Specifications	Soviet Aircraft	Nearest Western Counterpart
	<i>AN-10 Ukraina</i>	<i>Lockheed Electra</i>
Date into service	1958	1958
Gross weight, lb.	112,000	113,000
Maximum payload, lb.	29,000	21,000
Number of seats	84/126	66/91
Best cruise speed, kn	325	353
Maximum payload range n mi	1900	2400

For the first time, also, the Russians have made a systematic effort to reduce weight, discarding the old 1898 Pullman parlor-car furnish-

ings and the cast-iron toilets that up to now have been standard equipment on Soviet airplanes, and relying extensively on foam rubber, light-weight metals, and plastics.

Even more surprising is the attention paid to the more subtle ways of lowering the operating costs and improving the commercial attractiveness of the new models — such things as efficient ground-handling and servicing provisions, fuselage layout, accessibility of cargo hatches and baggage compartments — all of the hundreds of little design techniques that are so important to the achievement of rapid turnarounds and that add up to customer appeal. It is impressive that these techniques, up to now the exclusive hallmark of Western manufacturers, have been learned by the Russians so quickly and so well.

The potential competitiveness of the new Soviet models is well typified by the performance comparison shown between the *Ukraina* and the Lockheed *Electra*. The payload-gross-weight ratio has now shifted drastically in favor of the Soviet model, and the Russians seem to be embracing the concept of high-density seating for the first time. The large payload capacity of the *Ukraina* was, of course, achieved to some extent at the expense of range; the range of the *Ukraina* is substantially less than that of the *Electra*. But this seems to be a deliberate Soviet policy, and it may give us an interesting clue to Soviet aviation intentions.

To illustrate this point, the Soviet and Western developments are listed in Table IV in four range categories, from ultralong haul down to ultrashort haul. With a single exception, the Soviet aircraft fall into the medium-short-haul and very-short-haul class. On the other hand, the most important Western developments, particularly those of the United States, lie almost entirely in the long-haul field.

For the West, the explanation is obvious: The routes that have always been of greatest interest to the West as money-makers are long-haul nonstop routes such as the North Atlantic run and the new transpolar routes. Western operators are constantly under competitive pressure to provide a maximum of nonstop service. Thus we have tended in our aircraft designs to stretch range capabilities to the utmost, at considerable cost to ourselves in added structural weight, long-runway requirements, and so forth.

The fact that the Russians have not followed suit suggests that they are guided in their aircraft design not by any desire to capture a share of the lucrative international air traffic, but rather by the more modest range demands of their own domestic-route structure, and perhaps also by the requirements of international air communication *within* their own Eurasian continent — including particularly the Middle East, Western Asia, and the Far East.

TABLE IV  
SOVIET VERSUS WESTERN DEVELOPMENTS:  
CURRENT PROCUREMENT CYCLE

Range Category	Engine Type	USSR	United States	Other Western Developments
Ultralong haul (4000 to 8000 mi)	Piston	.....	DC-7 series (now) Super-Constellation series (now)	.....
	Turboprop	TU-114 <i>Rossia</i> (1959)	DC-10/DC-7D (1960?)	Bristol <i>Britannia</i> /Orion (1960?)
Medium-long haul (2500 to 4000 mi)	Turbojet	.....	Boeing 707-420 (1960) DC-8/ <i>Intercontinental</i> (1960)	Handley Page <i>Victor</i> (1961)
	Piston	.....	DC-6 series (now) <i>Constellation</i> series (now)	.....
	Turboprop	.....	.....	Bristol <i>Britannia</i> / <i>Proteus</i> (1957) Vickers <i>Vanguard</i> (1959)
Medium-short haul (1500 to 2500 mi)	Turbojet	.....	Boeing 707-120/320 (1959) DC-8 <i>Domestic</i> (1960) Convair 880 (1960) Convair 600 (1961)	Vickers VC-10 (1963)
	Piston	IL-14 (now)	Convair 440 (now)	.....
	Turboprop	AN-10 <i>Ukraina</i> (end-1958) IL-18 <i>Moskva</i> (end-1958)	Lockheed <i>Electra</i> (1958)	Vickers <i>Viscount</i> (now) Fokker <i>Friendship</i> F-27 (1959) Canadair 540 (1959)
Ultrashort haul (200 to 1500 mi)	Turbojet	TU-104/104A (now) TU-110 (mid-1958)	DC-9 Boeing 720	<i>Caravelle</i> (1958) <i>Comet 4</i> (1958); <i>Comet 4A</i> (1959)
	Turboprop	AN-8 <i>Flying Whale</i> (1958?) AN-14 <i>Little Bee</i> (utility aircraft—1958) Antonov proposal for LI-2 (DC-3) replacement	Douglas <i>Model 1940</i> (1962?) Frye <i>Safari F-2</i> (1959?)	Short PD-16 (proposal)



In this connection, it is worth noting that the Russians have made a special effort to design their new models to operate from very short runways and rough landing strips. They did this no doubt with their own primitive airfields in mind, but at the same time they were not unaware of the special appeal that this design feature would have in the under-developed world.

But with all the good economic sense that seems to have gone into the new aircraft, it should not be assumed that the Russians have abandoned their quest for a quick psychological impact.

The TU-114 — the *Rossia* — is ideally suited for exploitation as a fine example of the *sputnik* approach to aviation. This aircraft is a passenger conversion of the huge Soviet Bear bomber. It has four of the largest turboprop engines in the world, with eight contrarotating propellers, a cruising speed of over 400 knots, and a range that is more than adequate for a nonstop flight to New York. The deluxe 120-passenger version features a 48-seat restaurant, replete with tables and dumb-waiters, a telephone system, private sleeping cabins, and the kind of seat-spacing that spells the ultimate in luxury, comfort, and magnificence. Such an airplane cannot, of course, win any medals for its operating economy, but for the moment *Aeroflot* may consider it more important to dazzle the passenger than to sell the commercial operator on the attractions of this vehicle.

This is not to say that the TU-114 is an unattractive airplane. On the contrary, a tourist-class version, carrying 220 passengers in a high-density seating arrangement, is now planned by *Aeroflot*, and such an airplane might well show lower seat-mile costs over medium and long ranges than anything the West is likely to put into the air in the next few years. But for the present, *Aeroflot* needs prestige, and in this quest luxury may count for more than economy.

This leads to the second part of the discussion, namely the development of Soviet international air routes.

#### DEVELOPMENT OF SOVIET AIR ROUTES

In the field of air transport there is no parallel to the maritime concept of the "open seas" and freedom of entry into any port. On the contrary, the extravagant ideas of national air sovereignty that prevail have meant that the right to fly aircraft commercially from one country to another must be specifically negotiated between governments. This has given rise in the West to a complex system of bilateral air-transport agreements that vary widely in their degree of restrictiveness.

On the whole, the United States has been at the liberal extreme of the spectrum; we are a party to a multitude of agreements and conventions aimed at greater freedom of air commerce, and we are also a leading member of the international organizations (International Civil Aviation Organization and International Air Transport Association) that provide technical and operational supervision of international aviation. The USSR, on the other hand, has occupied an extreme position at the other end of the spectrum; she has abstained completely

from air commerce outside her own borders and has resisted all urging to join the international aviation community.

Until very recently the Soviet postwar aviation history was one of isolation, negativism, and neglect. The explosive development of global air transport in the Western world left the USSR almost completely untouched. As long as Stalin was alive not a single foreign commercial flight was permitted to enter the Soviet airspace, not even flights operated by Russia's own Satellites.

Soviet policy, however, began to change drastically toward the end of 1954 and has been evolving ever since. What has been the effect so far?

Figure 1 (page 274) shows the results of the new policy toward the Satellites. Previously the Russians had no air agreements with any of their own Bloc states; now all of them have been given the legal right to fly reciprocal services into Soviet territory, at least for a short distance. The Chinese and the North Korean airlines now link up with *Aeroflot* at the Asian border towns of Alma Ata, Irkutsk, and Chita. All the Eastern European countries are permitted to fly into Moscow, although only three have so far exercised this right, the Czech, Polish, and East German airlines. In addition, the USSR has openly encouraged the more or less independent development of the Satellite airlines and is supporting their ambitions to develop international routes of their own, particularly through the supply of new aircraft, including the TU-104.

A similar change has occurred in Soviet policy toward the major Western flying nations outside Russia's own orbit. But before examining the effect of this policy change, let us consider the geographic attractions of Soviet airspace for the West.

Figure 2 (page 275) shows important savings in distance that could be realized if the Soviet Bloc would really open up its airspace. Most important, perhaps, would be the link between Western Europe and Japan. A direct trans-Soviet link would cut in half the existing route going the long way around, and would greatly improve upon the new SAS orient-polar route via Alaska. Another route, one that appeals especially to the British, is that between London and Hong Kong, providing a potential link with Oceania. One other possibility is a route between the West Coast of the United States and India, which could cut thousands of miles off the present routes.

On the basis of distance alone, these routes certainly seem impressive, but it is well to remember that geography is only a small part of the problem. There is a real question, for example, of how much traffic would actually flow over such long-distance express routes. How much *intermediate traffic* could be developed on these routes? The Soviet Bloc itself is certainly not a promising market for future international passenger travel.

There is also the question as to whether the Soviet Bloc would be willing to cooperate internationally in the development of *controlled*

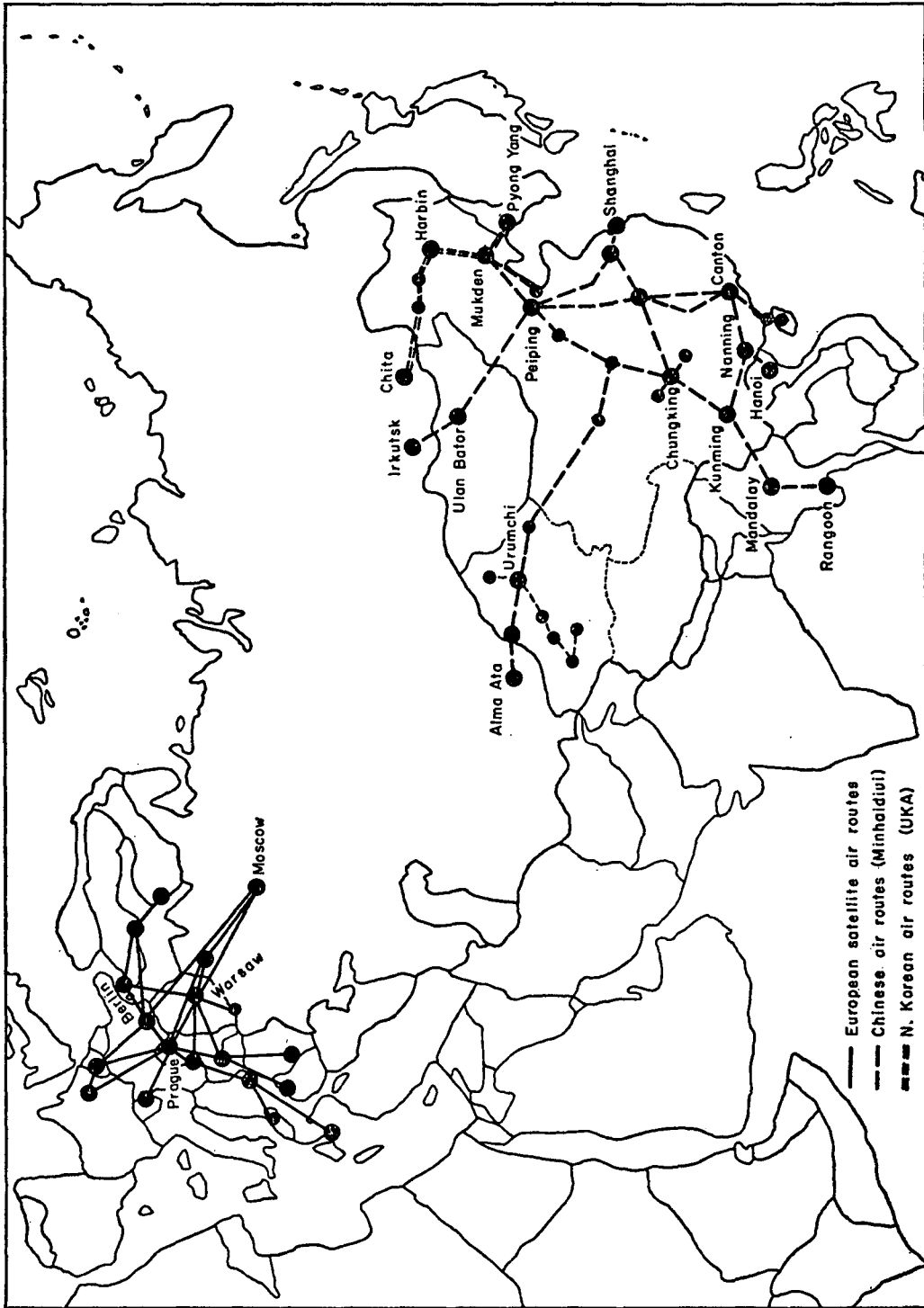


Fig. 1 — Soviet Bloc nations' air routes into USSR

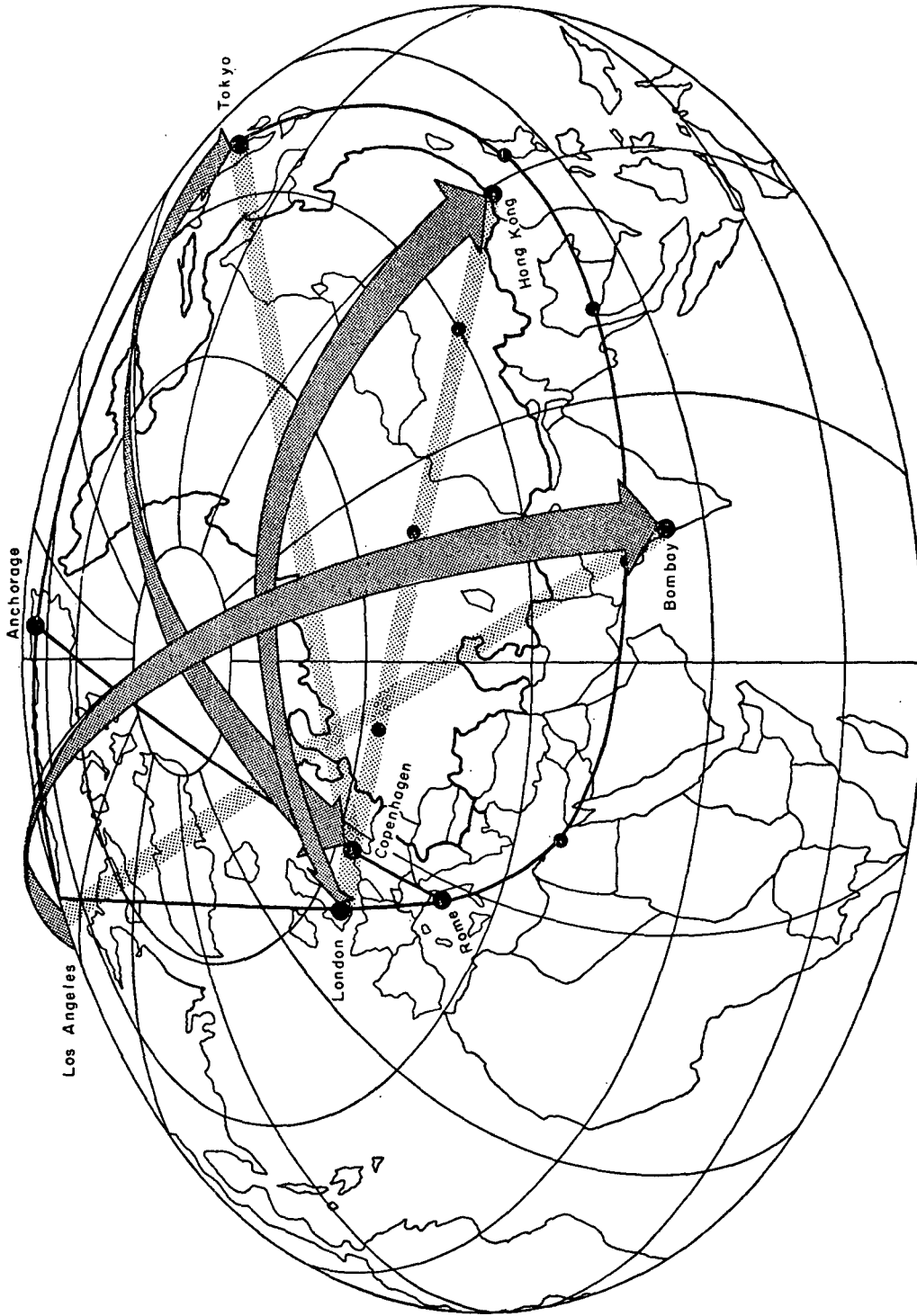


Fig. 2—Attractions of Soviet airspace

*airways*. A great deal of intimate technical cooperation is required for this, but so far the Russians have been both unwilling and unable to provide even the minimum technical services needed.

In other words, the enthusiasm of Western airlines for a trans-Soviet route *should* be very much dampened by these considerations, but it isn't. For reasons of competitive rivalry and national prestige, Western airlines have been vying with each other for the chance at traffic rights into the Soviet orbit, and the Russians have taken full advantage of this by playing off one against the other.

Figure 3 (page 277) pictures existing and proposed air routes into and around the Soviet Union. The thinner lines represent the present network of Western trunk routes skirting the Soviet Bloc—a kind of “capitalist air encirclement.” The heavy solid lines represent actual Western routes now being flown into the USSR. Only a few Western airlines have so far succeeded in implementing a reciprocal air agreement with the Russians: SAS, which now links the Scandinavian capitals with Moscow; the Finnish airline which operates a service between Helsinki and Moscow; KLM, linking Amsterdam to Moscow; Sabena, operating between Brussels and Moscow; and Air France, Paris to Moscow. In each case *Aeroflot* reciprocates by flying a parallel service into each of these capitals. In addition, the USSR has recently concluded air agreements with the United Kingdom and with India, which will soon permit similar reciprocal flights to be flown by BOAC between London and Moscow and by Air India International between New Delhi and Moscow. In every instance these flights terminate in Moscow.

Most Western airlines, however, are interested not so much in flying just into Moscow as a terminus, but in obtaining traffic rights to Moscow *and beyond*, to link up with the important global air routes. Thus, for example, the West European airlines (SAS, BOAC, Air France) would like to fly beyond Moscow to Tokyo; and Japan Airlines would like to fly beyond Moscow to Europe.

The Russians, on the other hand, are determined to keep foreign “penetration” to a minimum, and seem to be trying, wherever possible, to hold foreign airlines to “gateway points” near their borders rather than to permit them to cross any major portion of Soviet territory.

The only exception to this rule was made for, of all countries, Afghanistan. The Soviet-Afghanistan air agreement gives *Aeroflot* the right to fly into Kabul and beyond, in exchange for the Afghan airline's right to fly into Moscow and beyond. The only catch is that the agreement specifies that only native pilots and crews may be used on these flights, and since Afghanistan has neither suitable aircraft nor native crews, the Russians do not have much competition to fear from this direction.

The reason for this restrictiveness toward foreign airlines is that the Soviets have ambitions for their own. This becomes quickly apparent when we look at *Aeroflot's* route structure and its possible international

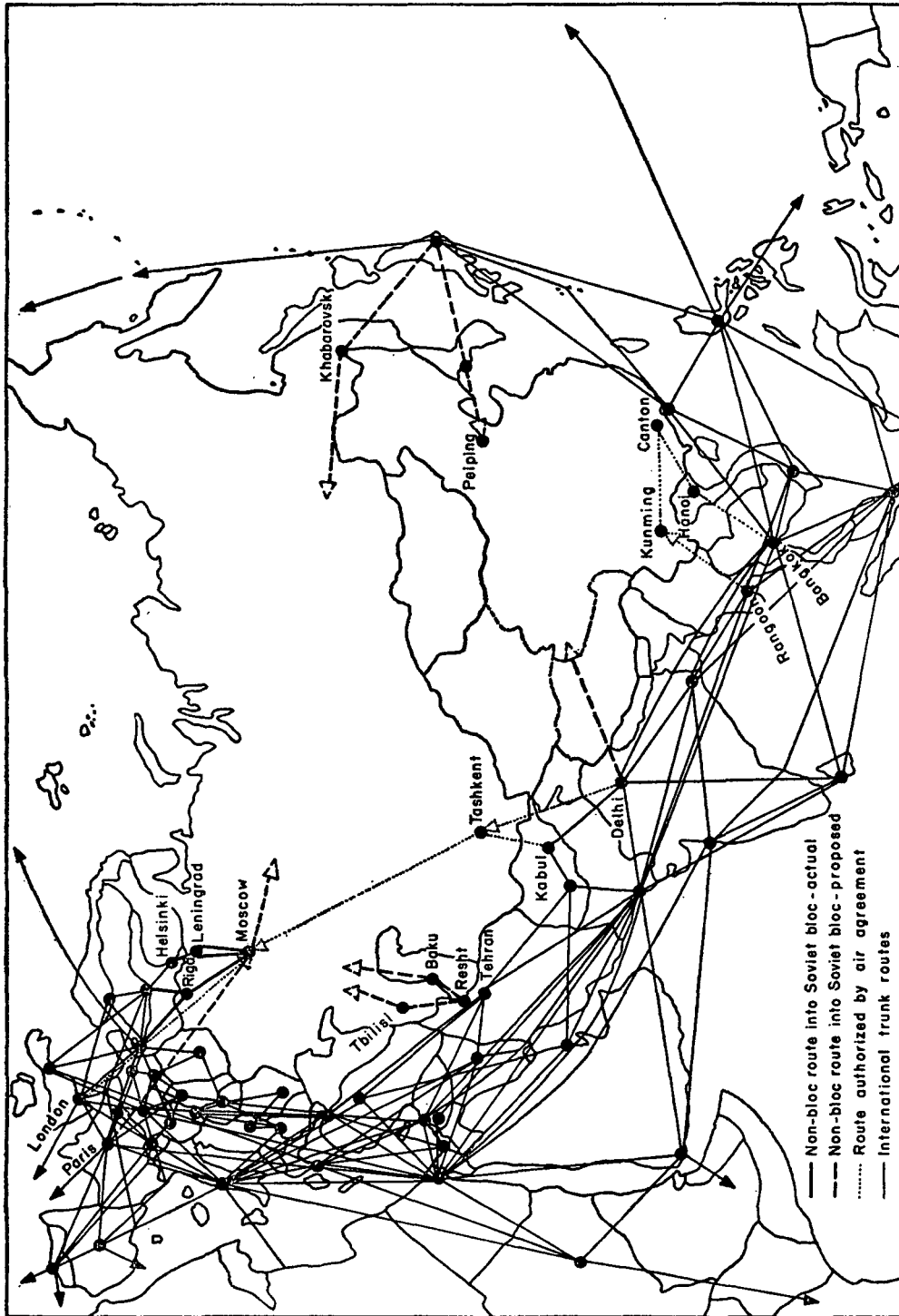


Fig. 3 — Trunk air routes and the Soviet bloc

extension. Figure 4 shows only the trunk routes with international significance, and their proposed and hoped for future extensions. The heavy lines represent all the TU-104 jet prestige routes that *Aeroflot* now flies. It may be noted that they are oriented as much toward the Middle East and Asia as they are toward Western Europe. Of course, by far the most important route so far is that linking Prague with Peiping. Thanks to an interline agreement between Air France and *Aeroflot*, and thanks to the speed of the TU-104, it is now possible to leave Paris on a Thursday afternoon, transact your business in Peiping on Friday, get in a good night's sleep, and be back in Paris in time for dinner Saturday night. Flying time, 16½ hours each way; the fare, \$200 less than by any alternative route.

The brightest gleam in the Soviet eye at the moment, of course, is to extend this route to Tokyo and thereby complete the valuable link between Western Europe and Japan. But how to do this *unilaterally*, without having to give up any major part of this politically valuable monopoly? This turns out to be quite a dilemma:

One possibility for the Russians is to ask the Japanese to permit *Aeroflot* to extend its route from Khabarovsk to Tokyo, in exchange for a Japanese flight from Tokyo to Khabarovsk. Khrushchev has, in fact, already made such an offer, and the Japanese promptly turned it down. They, of course, want traffic rights at least to Moscow; in other words, a fair exchange of capital for capital. But for the Russians this would mean a rival on a route they want very much to keep for themselves.

Alternatively, the USSR might ask China to approach the Japanese with an offer of exchanging air services between Peiping and Tokyo. This the Japanese might accept, but then it would not be the Soviet flag but the Chinese flag that would reap the glory of completing this valuable link between Europe and Asia, and this might not be to Russia's liking. For the moment, at least, there seems to be no satisfactory solution for the Russians on this route.

Another major Soviet ambition lies in the direction of India and Burma, and ultimately Indonesia. Here the Russians have already scored a clever success in Afghanistan, where they obtained traffic rights into Kabul and beyond in exchange for a worthless paper-concession to the Afghans that they cannot implement.

But the next stop on the route is India, and here they have found that they are dealing with a much more sophisticated government and a modern airline with a keen desire, and ample capabilities, to exploit the attractive route from Delhi via Moscow to London. For *Aeroflot* to obtain "beyond" rights in Delhi, India insists that the Russians yield comparable "beyond" rights in Moscow — something they have so far refused to do. The new Indo-Soviet air agreement provides only for exchange of traffic rights between Moscow and Delhi as termini.

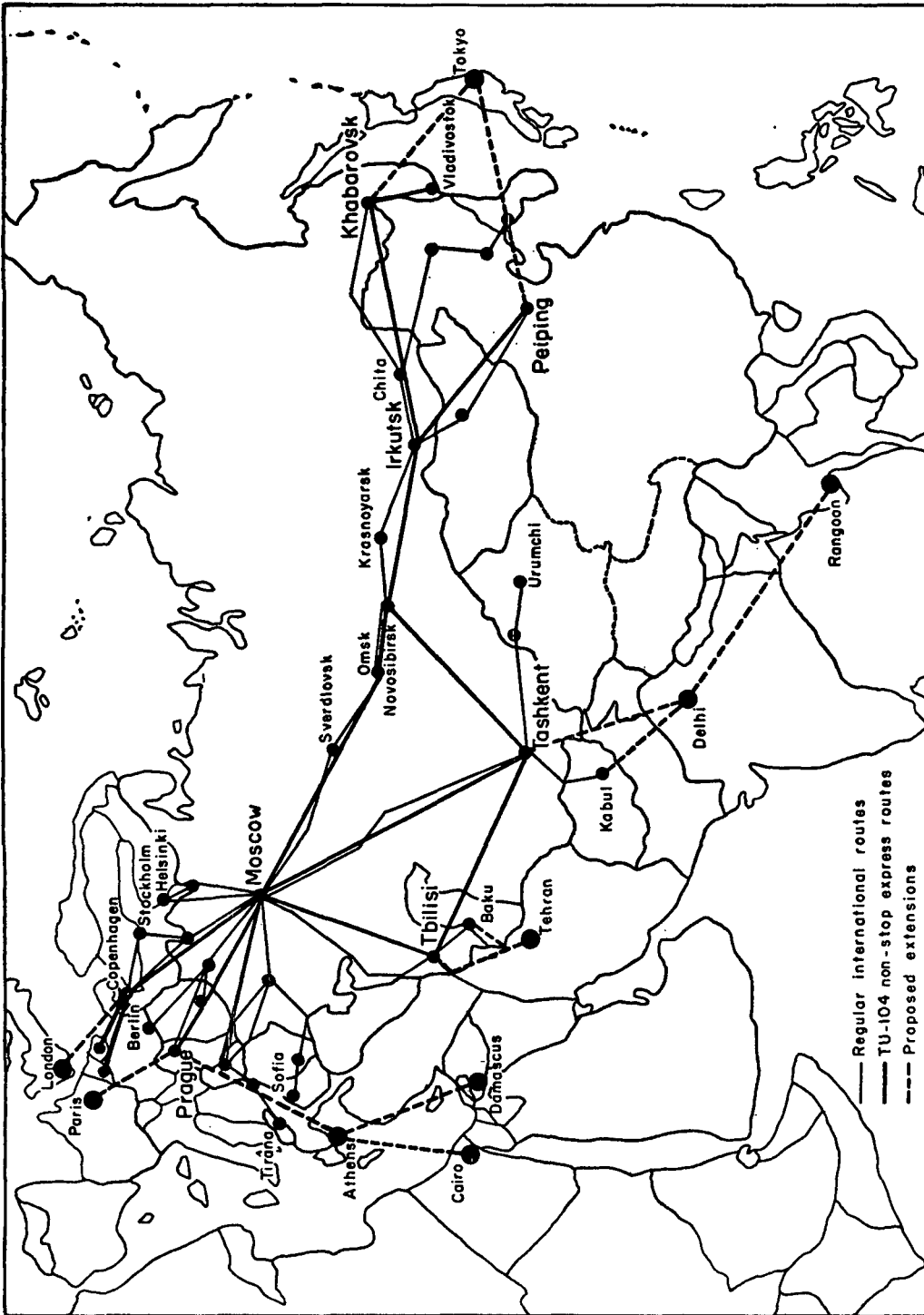


Fig. 4—Aeroflot international routes and proposed extensions



## EVALUATION

Soviet aviation tactics show no signs of being guided by considerations of commercial advantage, or by a desire to become a responsible member of the international aviation community. It might even be argued that the Soviet Union is not really interested in international aviation *as such*. Instead, the Soviets seem to look upon aviation as just another device, though a very attractive device, that can be used to enhance their political-power position at relatively low cost to themselves.

Up to now, what we have been seeing is a quite modest effort, consisting in the timely and selective use of very limited Soviet aviation resources for the purpose of winning political good will and technological respect, particularly in the under-developed world. In the future we are sure to be faced with a much more ambitious drive on the part of the Soviets to exert their aviation influence in that area through aircraft sales, technical aviation assistance, and modern air communication.

The first step in this direction is to develop technically and economically attractive aircraft. This they have done, and the new Soviet models will go into service in substantial numbers in the next 3 years. The next step now is to procure for *Aeroflot* the recognition and prestige that goes with the role of a major international flag carrier. To achieve this, they will want to fly their own aircraft into London, Paris, Tokyo, and New York — not because they want to compete with Pan American Airways or TWA, but because it will make the flag on the new Soviet jets look brighter and more impressive when they land in Cairo, Delhi, and Rangoon.

For the United States it is important to recognize the Soviet aviation offensive for what it is: not a commercial challenge aimed at undermining the air-transport leadership of the West, not a bid to slug it out with us competitively in the open market, but a broad contest for national prestige and political influence that employs aviation as only one of many weapons in its versatile arsenal.