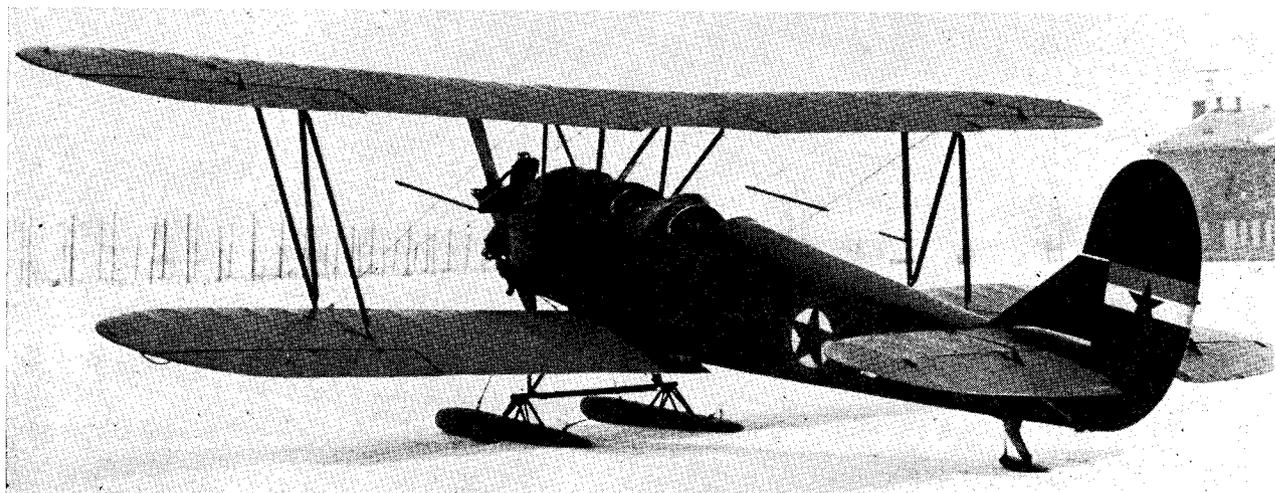


DECLASSIFIED

Intelligence



SOVIET PO-2, here equipped with skis and carrying North Korean markings, seems a distant cousin of familiar N2S and N3N family. Currently being used in Korea, this aircraft was first flown in 1927.

Induct
to

NIGHT HECKLERS IN KOREA

THE ENEMY'S USE of light aircraft in Korea has proved both unique and bothersome. Numerous encounters with Communist light planes have revealed valuable information on their mission and tactics.

These small aircraft are most often reported as night hecklers engaged in nuisance bombing over UN lines. In this role, a quixotic little biplane known as the PO-2 has provided the Communist pilot with the necessary platform. An idea of the airplane's antiquity can be gathered from the date of its first flight which occurred back in 1927. At that time the plane was designated the U-2, but was later renamed PO-2 in 1944. Design of this aircraft was carried out by Nikolai N. Polikarpov, who will be remembered for this particular plane for many years to come. He died in 1944.

In general, the PO-2 is reminiscent of the United States Navy's old N3N *Yellow Peril* biplane trainer. Information on the PO-2 reveals it as a two-seat biplane primary-trainer type of wood and fabric construction. A fixed landing gear, a single fin and rudder and a braced stabilizer are fitted. The biplane's span measures 37'5" with N-type struts hold-

ing the wings together. Maximum power of the five-cylinder radial engine at take-off is 125 hp. while its top speed is around 90 knots. The aircraft carries 45 gallons of fuel internally, which gives it a combat radius of 184 nautical miles. Four or possibly six 55-pound bombs may be carried under the wings and, in some instances, missiles have been thrown from the cockpit. Armament consisting of two forward-firing 7.62 guns and two rear-cockpit flexible 7.62 machine guns may be fitted.

Other aircraft attributed to Polikarpov were the reconnaissance bombers R-5 and R-10. His I-15 and I-16 monoplane fighters, sometimes called the *Rata* or *Mosca* were turned out in the mid-thirties. These little radial-engine fighters found their way to the Spanish Civil War proving ground, where they made a poor showing against superior German types.

Old but Versatile—In addition to the PO-2's presence in Korea, this little maid-of-all-work is to be seen throughout the Soviet world plying its versatile trade as a trainer, ambulance, glider tug, bomber, reconnaissance, liaison, etc. Normally the PO-2 is a two-seater, but three-seat versions appeared in 1930 while

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the ambulance variants carry four. An unusual version carried a "panier-nacelle" on each lower wing and was able to carry two stretcher cases.

On the large collective farms in the USSR, the PO-2 has been used for spraying crops with fertilizers or insecticides. It has also been used to extinguish forest fires. More recently, the spray version has been pressed into service in a battle against swarms of locusts which have been menacing the land in the vicinity of the Soviet-Iran border.

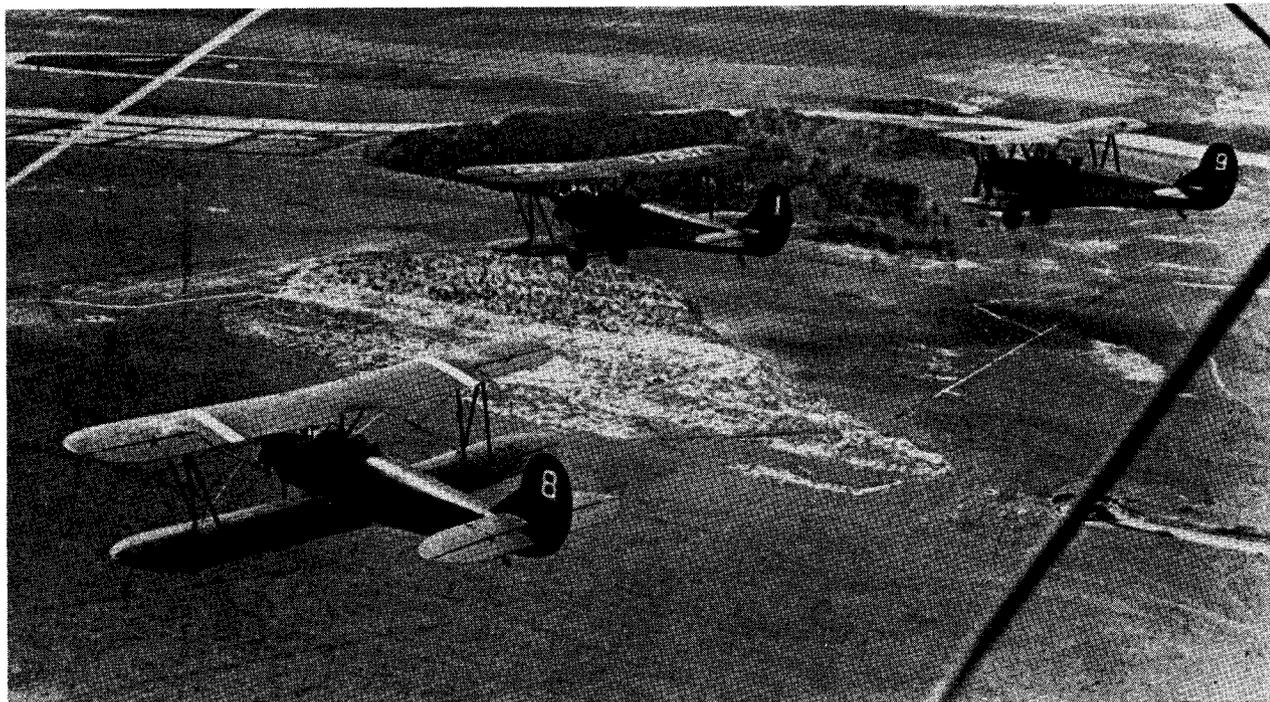
Other versions have appeared through the years, and some have been equipped with skis and floats. During World War II the PO-2 served in a variety of roles. It annoyed the Germans as a night nuisance bomber, sometimes dropping as much as 220 pounds of bombs on a single target. Rockets were attached to the wings of some PO-2's and these assault versions were used in the final battle for Berlin.

Targets for AF, Marine Night Fighters—The night nuisance role has been perpetuated in Korea with very few embellishments on World War II tactics. Still relying on the old night harassment plan, PO-2 pilots, however, have been faced with some new hazards. Foremost of these has been the advent of the UN

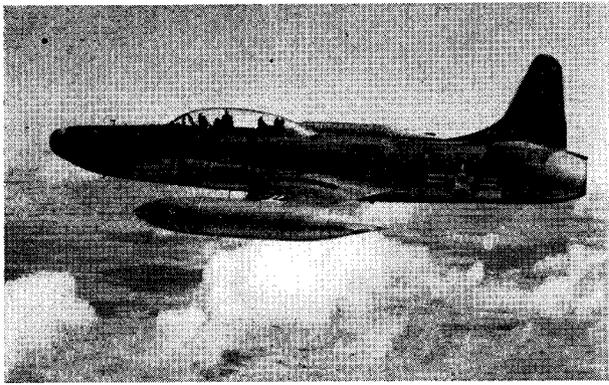
night-fighter. During the first half of 1951, PO-2's were visually contacted a number of times by Marine Corps and Air Force night fighters in the Inchon-Kimpo-Seoul area. In June 1951, a B-26 shot down a PO-2 and it crashed behind UN lines. A month later, one was downed by a F4U Corsair, and another destroyed in the air by a F7F Tigercat. Until this time, the proper method of attacking PO-2 aircraft had been undetermined.

Numerous night-combat and patrol flights had been vectored in pursuit of low, slow bogies, known to have been PO-2's. Vectoring was done by Tactical Air Control Center (TACC) *Dentist* located at Kimpo Airfield. During the summer of 1951, the low number of night-fighter radar contacts was probably due to a combination of three factors: the wood-and-fabric construction of the PO-2, the extremely low altitude and speed of the aircraft, and the rugged terrain over which the PO-2's generally operate. This, combined with the low altitude, made airborne radar practically useless because of ground return.

On one flight, the attacking aircraft when within 100 yards and closing on a PO-2 was still unable to contact the bogie on the scope of an efficiently operating



IN THIS photograph, probably made inside the Soviet zone, the two PO-2's on the right carry the markings of Russian commercial aircraft. On Number 8, forward of the ailerons, are Soviet Air Force insignia.



AN AIR FORCE F-94 all-weather interceptor collided with a PO-2 in Korea, destroying both aircraft.

radar set. On another flight, a pilot closed on a bogey through a cloud top at 1,800 feet and, upon breaking out of the cloud, found himself about to ram the PO-2's tail section. Later the pilot estimated the PO-2 to be within 50 feet of his fighter's nose section.

During February of 1952, a similar incident in which a F-94 *Starfire* was involved did not turn out so well. The *Starfire* was directed to the bogey by TACC, and three passes were made by the F-94 on the PO-2 aircraft before radar contact with both aircraft was lost by TACC. Radar contact was not regained, and later a UN pilot in the area reported seeing a flash at 2,000 feet in the vicinity of the reported intercept. From the information available and the location of the wreckage a few days later, it was deduced that the two aircraft exploded after collision.

Reports from one Marine night-fighter squadron indicated that all but one PO-2 contacted have gone into violent evasive maneuvers as soon as the night fighter had been observed. During these maneuvers, the PO-2's have returned fire from the rear cockpit while continuing flight in an erratic manner.

Pilots Not Hot—Furthermore, the pilots of these aircraft have not appeared to be of high calibre, because they do not seem to utilize to the limit the extreme maneuverability of their aircraft; nor do they appear to fly other than by the seat of their pants. They skirt and skip through the tops of clouds but do not attempt true instrument flight.

A revealing example of the flight procedures employed was found in the wreckage of a PO-2 downed by a F4U in July 1951. It consisted of a chart which set forth standard navigation techniques. One radical departure from navigational procedure as practiced

in the bourgeois air world cautioned: "Don't believe in the compass."

In runs made on PO-2's by Marine F7F-3N and F4U-5N aircraft, the bogey speed ranged from 60 to 90 knots. As a result, the night fighters have had to operate with full flaps, landing gear down, and at low power settings. In this flight attitude, the attacking fighter is hindered so far as maneuverability is concerned. With the continuous adjustment in power settings and attitudes necessary to close on a bogey flying between 60 to 90 knots, it has been found impossible to close on the tail of a PO-2 and not over-run it under the prevailing weather, topographical and radiological conditions of the Korean area.

One of the more successful attacks was made by a Marine F7F with a relatively wide-angle deflection shot, resulting in the complete destruction of the PO-2. During this attack, the pilot was able to observe the PO-2 throughout its disintegration. Observations indicate that under 20-mm fire, the PO-2's strutted, fabric-covered, wooden wings are the first portion to disintegrate. In another interception, a slight angle deflection shot from the rear accomplished the desired results. This victory was not quite so efficient in that after the 20-mm burst had been fired, the PO-2 was lost from view and further contact could not be established.

90 Knots in a B-26—An Air Force kill was accomplished by a B-26 *Invader* pilot who was returning from a night interdiction mission. As the B-26 closed, the PO-2 took evasive action flying between the hills. The B-26 followed, lowering his gear and flaps to reduce his speed to that of the enemy aircraft, about 90 knots. The Air Force pilot raked the PO-2 with 50-cal bullets before the PO-2 blew up.



ONE PO-2 was shot down by an F7F Tigercat pilot. UN aircraft make runs with flaps and wheels down.