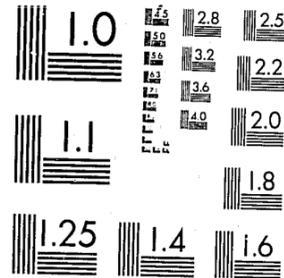


National Criminal Justice Reference Service



This microfiche was produced from documents received for inclusion in the NCJRS data base. Since NCJRS cannot exercise control over the physical condition of the documents submitted, the individual frame quality will vary. The resolution chart on this frame may be used to evaluate the document quality.



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Microfilming procedures used to create this fiche comply with the standards set forth in 41CFR 101-11.504.

Points of view or opinions stated in this document are those of the author(s) and do not represent the official position or policies of the U. S. Department of Justice.

National Institute of Justice
United States Department of Justice
Washington, D. C. 20531

DATE FILMED

10/29/81

52300

INTERNATIONAL CRIMINAL POLICE ORGANIZATION

INTERPOL

44th GENERAL ASSEMBLY SESSION

BUENOS AIRES 9th - 15th October 1975

Report Submitted
by the
GENERAL SECRETARIAT

NCJF

NOV 21 1978

ACQUISITIONS

N° 11

SUBJECT : The Use of Aircraft by the Police

A

The role of aircraft as support vehicles in law enforcement is many-faceted. Aeroplanes and helicopters make it practicable to ensure surveillance or carry out searches over large areas, and their availability for transporting policemen by air makes it possible for police forces to intervene rapidly in a variety of places and situations.

Some police forces have even instituted day-and-night aircraft patrols over specific geographical areas divided into "beats", with each aircraft assigned responsibility for a given beat*.

Various types and sizes of aircraft - e.g., short-takeoff twin-engine fixed-wing light aircraft, or 2-place limited range helicopters - are used by police forces in numerous countries. The composition of each force's fleet depends essentially on police budgetary considerations, the kinds of mission the force usually performs, and the nature of the territory over which it has jurisdiction.

It seemed that it would be interesting to find out what services police forces can and do perform with aircraft, whose capabilities increase almost daily and render them ever more suitable for police work. That is why the I.C.P.O.-INTERPOL General Assembly requested that a report - to be entitled "The Use of Aircraft by the Police" - be drawn up.

* The Los Angeles County (U.S.A.) Sheriff's Department, for example, which has a fleet of 16 helicopters and 3 light planes, uses several "Hughes 300" helicopters and the three planes for patrols of this kind over the Los Angeles Basin.

To obtain the information necessary for drafting the proposed report, the General Secretariat prepared a questionnaire to accompany Circular No.2792-MOTEC/800 of 20th June 1974 and sent it out to the following twenty-seven countries :

ALGERIA	INDONESIA	PHILIPPINES
ARGENTINA	ISRAEL	SPAIN
AUSTRALIA	JAPAN	SWEDEN
AUSTRIA	KENYA	THAILAND
BRAZIL	MALI	UNITED KINGDOM
CANADA	MEXICO	UNITED STATES
CHILE	NETHERLANDS	VENEZUELA
FEDERAL GERMANY	NIGERIA	ZAIRE
FRANCE	NORWAY	ZAMBIA

The General Secretariat received no replies from the National Central Bureaus in ALGERIA, CHILE, KENYA, NETHERLANDS, PHILIPPINES, and SPAIN, and the NCBs in BRAZIL, MALI, ZAIRE, and ZAMBIA informed us that police forces in their countries did not conduct airborne operations.

The remaining seventeen countries sent replies to the questionnaire.

The data in those replies has been collated and is presented in this report under the following main headings:

- The kinds of missions performed and the number of flight hours logged for them in 1973.
- The types of aircraft and the ground facilities used.
- The available personnel: crews, information on personnel (police and civilian), and training.
- The special departments within police forces: structures and responsibilities.

I. KINDS OF MISSIONS PERFORMED AND NUMBER OF FLIGHT HOURS LOGGED FOR THEM IN 1973

ARGENTINA:

In 1973, the Policia Federal Argentina logged 270 flight hours in fixed-wing aircraft and 1640 flight hours in helicopters in the performance of police missions, including road traffic surveillance, medical evacuation, crowd surveillance, and general crime prevention.

The Policia Nacional de Fronteras - part of the Argentine Gendarmeria Nacional - logged a total of 130 flight hours, including 50 flight hours in fixed-wing aircraft and 80 flight hours in helicopters, for the following kinds of police missions:

- national border patrol and inspection 80 flight hours
- highway and industrial site surveillance .. 30 flight hours
- Contraband control 20 flight hours

In addition, a total of 220 flight hours were logged for the following activities:

- surveillance of forest areas 25 flight hours
- disaster relief 60 " "
- medical evacuation 48 " "
- personnel training 65 " "
- equipment maintenance 22 " "

Also, the Profectura Naval Argentina logged 559.9 flight hours in accomplishing other than police missions.

AUSTRALIA:

The various Australian State police forces make considerable use of aircraft because of the very large territories under their separate jurisdictions, but they do not have their own aircraft fleets and consequently they have no ground installations or maintenance facilities of their own. For their regular and special missions, they use the equipment and installations of regular airlines, charter companies, aircraft rental companies, etc. (Cf. "AIRCRAFT AND GROUND FACILITIES": "AUSTRALIA".)

It is not feasible to describe in this report each Australian State police force's aircraft usage situation; therefore, this section will indicate the major aspects of the various forces' situations, with particular emphasis on the South Australia Police Department's use of aircraft, which was reported in detail.

The kinds of missions most often conducted with aircraft in the various States are:

- Surveillance and co-ordination of dense road traffic;
- Personnel transport in connection with assignments, including court appearances and training courses;
- Escort of prisoners between detention centres and courts, and transport of exhibits for use in court;
- Search and rescue operations over land and sea (in some States);
- Searches for missing persons;
- Criminal investigations and searches for fugitives.

Most of the State police forces in Australia did not record the number of flight hours spent in accomplishing the various kinds of missions in 1973.

The South Australia Police Department, however, has reported that the police of that State logged a total of 839 flight hours for missions in 1973, approximately as follows:

- Transport of police and prisoners	805 flight hours
- Road patrols for floods and stranded motorists	20 " "
- Searches for fugitives	8 " "
- Searches for missing persons	4 " "
- Assistance to C.I.B. in livestock stealing cases	2 " "

AUSTRIA:

In 1973, the total number of flight hours logged for police missions was 4780 hours and 14 minutes, as follows:

- Emergency assistance	599 h. 22 m.
- Airborne Police Unit missions (crowd, surveillance, road traffic surveillance, manhunts, etc.)	2667 h. 31 m.
- Public safety missions (flood and avalanche watches, and scientific research)	296 h. 57 m.

The rest of the time was spent on training and maintenance.

CANADA:

In 1973 the Ontario Provincial Police logged a total of 4340 flight hours and 30 minutes for police missions, as follows:

- Road traffic surveillance and law enforcement	4241 h. 30 m.
- Emergency lifesaving	18 h. 40 m.
- Crowd surveillance	15 h. 50 m.
- Search missions	28 h. 50 m.
- Surveillance of criminals	15 h. 45 m.
- Aerial photography	19 h. 45 m.

Also in 1973, the Montreal Urban Community Police logged a total of 1889 flight hours in helicopters for the following kinds of missions: surveillance of persons; pursuit of hijackers on roads; road traffic surveillance and checks; crowd surveillance and analysis; VIP security escorts; searches for

persons and traces; water rescues; patrols over banks; security cover for responses to alarms; fire assistance; arrest assistance; patrols for locating stolen automobile strippers; aerial photography in connection with crime investigations.

From 15th January to 15th July 1974, the Quebec Police Force logged 755 flight hours in helicopters for police missions, as follows:

- Road traffic surveillance	410 flight hours
- Crime prevention	230 " "
- Emergency lifesaving	40 " "
- Search rescue	50 " "
- Crowd surveillance	25 " "

In fiscal year 1973, the Royal Canadian Mounted Police logged 17,510 flight hours in its own aircraft for police missions, including transport for police officers, prisoners and mental patients, transportation for VIPs, searches for missing persons, emergency lifesavings, and traffic law enforcement.

FEDERAL GERMANY:

Separate records are kept for airborne missions conducted by the police forces in the various Länder and for those carried out by the Federal Border Patrol, which is a service of the Federal Ministry of the Interior and can conduct operations both autonomously and at the request of federal or Land authorities.

1. Kinds of police missions in the various Länder and flight hours logged for them.

Some of the police forces (Berlin, Bremen, Saarland, and Schleswig-Holstein) do not use aircraft. The total number of flight hours logged by police forces in the seven other Länder in 1973 is 12,874.

The kinds of missions and the number of flight hours logged for each are as follows:

- Road traffic missions (observation and co-ordination at times of dense traffic or accidents)	8428 h. 20 m.
- Searches for missing persons or property	669 h. 25 m.
- Water pollution control and general environmental protection	403 h. 15 m.
- Crowd surveillance (demonstrations, sports events ...)	384 h. 45 m.
- Crime investigation	360 h. 40 m.
- Special flights (VIP transportation, protection of visiting dignitaries)	293 h. 02 m.

- Lifesaving and assistance (emergency transport of medical supplies and blood for transfusions) 54 h. 13 m.
- Aerial photography 47 h. 30 m.
- Other assistance 17 h. 25 m.

2. Kinds of Federal Border Patrol missions and number of flight hours for each.

This service is responsible for conducting Federal land and sea border patrols and emergency lifesaving operations, and it frequently lends its support to the police forces of the Länder and to the Federal C.I.D. It conducts special flights for high-ranking government officials.

9038 flight hours and 33 minutes in all were logged for missions in 1973, as follows:

- Security, surveillance, and protection 3866 h. 59 m.
- Emergency lifesaving 2320 h. 25 m.
- Special flights for government officials 1388 h. 02 m.
- Miscellaneous public service missions 1075 h. 33 m.
- Assistance to state police forces 387 h. 34 m.

The total number of flight hours logged by the state police forces and the Federal Border Patrol combined is 21, 913 hours and 3 minutes.

FRANCE:

In 1973, the French National Police logged a total of 9560 flight hours for missions, as follows:

- Medical evacuation and lifesaving 5200 flight hours
- Road traffic observation and control 1500 " "
- Control of airports and air space 350 " "
- Surveillance of coasts and waterways 250 " "
- Surveillance of public order 200 " "
- Searches for fugitives 360 " "
- Crowd control at sports events 400 " "
- VIP transportation 100 " "
- Training, testing, and demonstration flights .. 400 " "
- Miscellaneous missions 800 " "

INDONESIA:

In 1973, the Sea & Air Police Corps - part of the Indonesian National Police - logged a total of 182 flight hours and 49 minutes for missions, as follows:

- Road traffic surveillance 8 h. 50 m.
- Search and rescue 26 h. 05 m.
- Executive transportation 5 h. 15 m.
- Specific police duties 16 h. 20 m.

The rest of the time was spent on training and test flights, parachute training, etc.

ISRAEL:

In 1973 the Israel Police logged totals of 600 flight hours for light airplanes and 850 flight hours for helicopters for their missions, apportioned as follows:

- Traffic control and surveillance 60%
- Search missions 15%
- Other duties (lifesaving, VIP protection, etc.).. 25%

JAPAN:

A total of 4761 flight hours was logged for missions conducted by police helicopters in 1973, as follows:

- Road traffic patrols, control, and law enforcement 1257 hours
- Security operations (crowd control, disaster security) 496 hours
- Crime investigation 285 hours
- Other missions (lifesaving, medical evacuation, etc.) 2723 hours

MEXICO:

A total of about 3500 flight hours were spent in conducting police missions in Mexico in 1973, of which 875 flight hours were used for road traffic surveillance, crowd surveillance, and searches for drug traffickers at international borders.

NIGERIA:

From June to December 1973, 117 helicopter flight hours were spent on road traffic surveillance missions and 30 hours and 30 minutes total time was logged for use of a place in search and rescue missions.

NORWAY:

The Norwegian Police do not have their own aircraft or aircraft personnel. Military and civilian aircraft and crews are used. In 1973, a total of 1175 flight hours and 5 minutes were spent on various missions, including medical evacuation (over half of the flight hours), search missions, lifesaving operations and personnel transportation, and road traffic surveillance (11 hours and 25 minutes only).

SWEDEN:

A total of 8064 flight hours were logged for missions conducted by helicopter, as follows:

- Traffic surveillance and control approx. 6200 hours
- Searches, medical evacuation, and other assistance missions approx. 1200 hours
- Miscellaneous missions (surveillance of marine traffic and hunting and fishing grounds, etc.) approx. 650 hours

THAILAND:

In 1973, a total of 16,070 flight hours and 30 minutes were logged for police missions, including:

- Border patrol 9907 hours
- Emergency lifesaving missions 68 hours
- Search missions 30 hours
- Road traffic surveillance 5 hours

UNITED KINGDOM:

In 1973, the police forces in England, Wales and Scotland logged about 1327 helicopter flight hours (including 841 hours and 20 minutes logged by the London Metropolitan Police alone) for various missions, including searches and other operations in cases of serious crimes, arrest assistance, road traffic and crowd control, aerial photography, personnel training purposes,

transfer of prisoners, rescue operations, and other miscellaneous missions. Of the total of 841 hours and 20 minutes logged by the London Metropolitan Police, 65 hours were logged for criminal intelligence missions, 15 hours for escort missions, and 19 hours for aerial photography missions.

UNITED STATES:

In 1973 the Chicago Police Department logged 397 helicopter flight hours for police missions, as follows:

- Road traffic surveillance 50.5 hours
- Aerial photography 33.7 hours
- Covert surveillance 23.4 hours
- Search for missing persons 9.2 hours
- Lakefront searches 10.6 hours
- Response to radio requests 22.5 hours

The rest of the hours were spent on crime prevention patrols, searches for criminals, etc.

In fiscal year 1973-74, the Los Angeles County Sheriff's Department logged 13,487 hours and 36 minutes for airborne police missions, including 11,217 h. 18 m. for helicopter use and 2270 h.18m. for helicopter use and 2270 h. 18 m. for aeroplane use, as follows:

- Searches 437 h. 12 m.
- Rescue missions 591 h. 30 m.
- Transportation 1054 h. 00 m.
- Training 201 h. 30 m.
- Surveillance 551 h. 54 m.
- Aerial photography 228 h. 12 m.
- Patrols 9938 h. 18 m.
- Other missions 485 h. 00 m.

In 1973, the New York City Police Department Aviation Unit logged a total of 4581.1 flight hours, including:

- "Program Flights" (patrols) 1943.4 h.
- Road traffic surveillance 904.2 h.
- VIP transportation 441.0 h.
- Surveillance 278.3 h.
- Aerial photography 152.2 h.
- Training 460.8 h.
- Medical evacuation and transportation 20.3 h.

VENEZUELA:

In 1973, the Policía Metropolitana del Distrito Federal (Caracas), with the assistance of military pilots, logged a total of 360 helicopter flight hours for missions such as road traffic control, border patrols, emergency lifesaving, crowd surveillance, searches for missing persons, medical evacuations, and surveillance of beaches during the tourist season.

*
* *

AIRCRAFT AND GROUND FACILITIES

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
ARGENTINA : Policia Federal	1 twin-engine double-turbine fixed-wing aircraft for passengers and cargo, and 4 double-turbine fixed-skid helicopters for passengers and cargo.	Purchased new.	The Policia Federal has its own helicopter installations only.
Gendarmeria National	6 twin-engine fixed-wing aircraft, as follows: 2 Piper Navajo PA 31; 1 Cessna 402; 3 Piper Aztec PA 23. 2 single-engine fixed-wing aircraft, as follows: 1 6-place Piper Cherokee Six; 1 2-place Piper Cherokee 140. 4 4-place Fairchild-Hiller 1100 helicopters.	Purchased new except the Cessna 402.	The <u>Gendarmeria National</u> has its own hangars, sheds, and heliport.
Prefectura Naval	5 Skyvan double-turbine fixed-wing aircraft, for 18 passengers, 1500 kg. of cargo, or 6 stretchers. 6 4-place Hughes 500 amphibious helicopters, each capable of carrying two stretchers. 3 3-place Bell 47 amphibious helicopters.	Purchased new	The <u>Prefectura Naval</u> has no ground installations for fixed-wing aircraft.

COUNTRY		PUBLIC AND PRIVATE SOURCES OF AIRCRAFT FOR POLICE USE
AUSTRALIA	<p>None of the state police forces owned their own aircraft in 1973. However, they often used aircraft for their missions. They used:</p> <ul style="list-style-type: none">- regular airlines;- charter aircraft and helicopter services;- 3- to 7-place single-engine light aircraft hired or borrowed from private individuals or official organisations. <p>The South Australia Police Force leased, on a permanent basis, the type of light aircraft described below, which was well suited for the missions to be performed: One 7-place Piper PA 32-300 Cherokee Six, with the following specifications:</p> <ul style="list-style-type: none">- a single 300-horsepower, 2700 rpm Lycoming engine with fuel injection;- speed: 150 mph;- range: 600 miles;- fixed undercarriage;- air conditioned.	<p>The situation varied from state to state. All of the Australian state police forces made frequent use of domestic flights regularly scheduled by commercial airlines; other sources of aircraft for police use can be summarised as follows:</p> <ul style="list-style-type: none">- commercial charter services: Northern Territory, Queensland, Tasmania, and Victoria.- aircraft leasing services: Queensland, Western Australia (occasionally). South Australia permanently leased and used one aircraft (see opposite column for details).- occasional loan of aircraft:<ul style="list-style-type: none">a) by private individuals: Queensland (the aircraft are loaned either at no charge or at cost of fuel and oil used.b) by the Air Force: Western Australia. <p>Helicopter use:</p> <ul style="list-style-type: none">a) helicopter charter services: Queensland, Tasmania and Victoria.b) helicopter loans from other administrative services: New South Wales (helicopter loaned by the New South Wales Department of Main Roads). <p>The following state police forces have made plans to acquire fixed-wing aircraft:</p> <ul style="list-style-type: none">- New South Wales (a 10-place twin-engine aircraft)- South Australia (a 7-place Piper PA 32-300 fixed-wing aircraft; see opposite column).

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
AUSTRIA	4 4-place Agusta-Bell 47 J-3B1 helicopters; 6 5-place Agusta-Bell 206 Jet Ranger helicopters; 5 2-place Piper PA-13 Super Cub airplanes; 1 4-place Piper PA-28 Cherokee airplane.	Purchased new.	1 heliport and maintenance workshop in Vienna; periodic commercial aircraft maintenance.
CANADA			
Ontario Provincial Police	6 4-place Cessna 172 fixed-wing aircraft capable of flying between 50 and 150 mph.; 2 5-place Bell 206 B Jet Ranger helicopters with interchangeable snowskis and floats, capable of conversion to ambulance configuration.	The Cessna 172s are leased.	Public airports are used; maintenance, repairs and pilots are included with the leasing.
Montreal Urban Community Police	2 Hughes 300 or occasionally Hughes 500 helicopters (manufacturer's brochures on these aircraft have been received at the General Secretariat).	The aircraft are leased.	1 heliport on the roof of Police Headquarters and 7 helistops on city-owned property; maintenance and repairs are performed by the leasing companies.
Quebec Police Force	2 5-place Bell 206 Jet Ranger helicopters.	Purchased new.	Provincial Ministry of Transport's Air Division installations.
Royal Canadian Mounted Police	20 fixed-wing aircraft, as follows: 6 twin-engine De Havilland Otters; 6 single-engine De Havilland Otters; 6 single-engine De Havilland Beavers; 1 Beechcraft King Air (Executive Type); 1 twin-engine amphibious Grumman Goose. 2 helicopters, as follows: 1 Bell 212 and 1 Bell 206B. All the single-engine aircraft are capable of being used with wheels, skis, or floats, depending on the season.	Purchased new.	The R.C.M.P. owns 6 installations and rents hangar space at 11 others. Maintenance is performed by "Special Constables" trained for this work before engagement in the R.C.M.P.

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
FEDERAL GERMANY	<p>The various state police forces and the Federal German Border Patrol use a total of 83 helicopters.</p> <p>The <u>state police forces</u> use 30 helicopters*, as follows: 11 Alouette-Astazou II, type SA 318 C; 2 Alouette-Astazou III, type SA 318 B; 3 Alouette-Astazou III, type SA 319 B; 4 Gazelle, type SA 341 G; 10 Bölkow MBB, type BO 105 C.</p> <p>The <u>Federal German Border Patrol</u> uses 53 helicopters*, as follows: 22 Alouette (model and type not reported); 13 Bell UH1D; 4 Bell 212; 12 Bölkow BO 105; 2 SA 330 Puma (plans include a fleet of 16 helicopters of this type for 1976).</p>	All except one of these aircraft were purchased new.	<p><u>State police force</u> helicopters are usually housed in hangars leased from companies at civil aviation airports. One <u>Länd</u> has its own police airport, and one <u>Länd</u> uses military airport facilities.</p> <p>Each <u>Länd</u> uses authorized repair and maintenance services for all work to be done on the aircraft, except structural modifications.</p> <p>The <u>Federal German Border Patrol</u> has five specially modified helicopters and five repair and maintenance hangars and teams for all work to be done on the aircraft, except structural modifications.</p>
FRANCE	45 Alouette II helicopters, for 4 or 5 persons; in ambulance configuration, for 1 (possibly 2) stretchers and 1 doctor. Empty weight: 980 kg.; maximum gross weight: 1600 kg.; true air speed (TAS): 165 km/h.; service ceiling: 4500 m.; endurance: 3h.15m.	Purchased new.	The police force usually has its own facilities (hangars, sheds, garages, offices) at public airports. The Gendarmerie also has helipads reserved for its use exclusively.
* See Appendix for specifications and performance data.			

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
FRANCE	<p>20 Alouette III helicopters, for 6 or 7 persons; in ambulance configuration, for 1 (possibly 2) stretchers and 1 doctor. Empty weight: 1200 kg.; maximum gross weight: 2100 kg.; TAS: 190 km/h.; service ceiling: 6500 m.; endurance: 2h.30m.</p> <p>6 Cessna 206 C fixed-wing aircraft, for 6 persons; in ambulance configuration for 1 stretcher and 1 doctor with lifesaving equipment. Empty weight: 900 kg.; maximum gross weight: 1633 kg.; TAS: 240 km/h.; service ceiling: 4500 m.; endurance: 4 hours.</p> <p>- About a dozen 4-place Morane-Rallye, Cessna, and Robin-Jodel fixed-wing aircraft leased from and maintained by aviation clubs.</p>		
INDONESIA	4 light fixed-wing aircraft, as follows: 1 Cessna 180; 1 Aero Commander 560 A; 1 Aero Commander 500 A; and 1 Beechcraft SH-18.	All except the Beechcraft were obtained through U.S. aid programs.	The police force has its own hangar for maintenance and minor repairs.
ISRAEL	Some 3-place helicopters and some 9-place light fixed-wing aircraft	Leased from private companies.	The police force does not have its own ground facilities.
JAPAN	24 helicopters (8 piston-type and 16 turbine-type).	Purchased new.	In most instances, police forces have their own ground facilities.
MEXICO	10 Cessna 185 fixed-wing aircraft and 9 helicopters (Bell 212 and Bell 206 B).	Purchased new.	Police personnel do some of the maintenance work.
NIGERIA	1 Bell G 5 A helicopter and 1 Cessna 310 fixed-wing aircraft.	Purchased new.	Non-police installations.

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
NORWAY	Civilian and military aircraft, as follows: UH1B, S61N, and Sea King helicopters, and DHC3 Otter, DHC6 Twinotter, Cessna 206, Piper Aztec, PA3 Navajo, P3B Orion, and C 130 Hercules fixed-wing aircraft.	Requisitioned.	
SWEDEN	<p>6 5-place Bell 206 B helicopters, empty weight: 800 kg.; maximum gross weight: 1450 kg.; endurance: 2 hr. 45 min.; maximum cruising speed: 220 km/h; maximum range: 600 km; medically equipped.</p> <p>1 3-place Bell 47G-5 helicopter, empty weight: 885 kg.; maximum gross weight: 1290 kg.; endurance: 3 hr.; maximum cruising speed: 145 km/h; maximum range: 430 km. (5 additional Bell 47G-5 helicopters used between 15th June and 31st August of each year).</p>	Purchased new.	The police force does not have its own facilities.
THAILAND	<p>77 fixed-wing aircraft and helicopters, as follows:</p> <ul style="list-style-type: none"> - Caribou, Skyvan, Cessna, Dornier, Porter, Airtourer, and Airtrainer fixed-wing aircraft; - Bell 205 A, Bell 204 B, Fairchild, and Kawasaki E 4 S-62 helicopters. 	Purchased new.	The police force has its own ground facilities.
UNITED KINGDOM England, Wales and Scotland.	<p>240 civil helicopters available to police forces. The kinds most often used are:</p> <p>Hughes 300 helicopters, for 2 or 3 persons; speed: 85 mph; range: 200 miles.</p> <p>Bell 47 helicopters, for 2 or 3 persons;</p>	Leased.	Most police headquarters have helicopter landing areas.

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
UNITED KINGDOM England, Wales and Scotland	speed: 130 mph; range: 350 miles. For some missions, the London Metropolitan Police has used a Westland Gazelle and a Hiller FH 111.		
Northern Ireland	The Royal Ulster Constabulary uses military helicopters.		
UNITED STATES Chicago Police Department	1 helicopter (make and specifications not indicated).	Purchased new in 1968	Based at city-owned hangar facilities at a Chicago airport. The police department has its own heliport.
Los Angeles County Sheriff's Department	16 helicopters, as follows: 6 Hughes 300; 1 5-place Hughes 500 Jet, airspeed: 150 mph, maximum operating altitude: 18,000 ft.; 1 3-place Hughes 300 C, airspeed: 87 mph, maximum operating altitude: 14,000 ft.; 6 3-place Bell 47G3, airspeed: 105 mph, maximum operating altitude: 20,000 ft.; 2 18-place Sikorsky S-58 Choctaw, airspeed: 145 mph, maximum operating altitude 14,000 ft. 3 single-engine light fixed-wing aircraft, as follows: 1 4-place Cessna 182, airspeed: 140 mph, maximum operating altitude: 14,000 ft. 1 4-place Maule Rocket, airspeed: 150 mph, maximum operating altitude: 10,000ft. 1 6-place Helio Courier, airspeed: 150 mph, maximum operating altitude: over 20,000 ft.	Purchased new, except the 2 Sikorskys, the Helio-Courier, the Hughes 500 and one of the Hughes 300s.	The police department has its own heliport.

COUNTRY	AIRCRAFT USED BY THE POLICE	PROCUREMENT DATA	GROUND FACILITIES
New York City Police Department	8 helicopters, as follows: 1 Sikorsky CH 34 C; 4 5-place Bell Jet Rangers (3 model 206 A and 1 model 206 B); 2 Bell 47G4A models with dual controls and searchlights; 1 4-place Bell 47J2A model with a hoist and capable of being used with skids or floats.	Purchased new, except the Sikorsky helicopter	Hangar facilities leased. Repair and maintenance performed by police personnel.
VENEZUELA	2 5-place Bell 206 B helicopters, endurance: 3 hours.	Purchased new.	The police force has its own heliport.

PERSONNEL: CREWS, OTHER PERSONNEL (POLICE AND CIVILIAN), AND TRAINING:

ARGENTINA:

Policia Federal: Each crew for fixed-wing aircraft consists of a pilot, a co-pilot, and mechanics; each helicopter crew consists of a pilot and a mechanic.

The pilots are trained by the Air and Security Forces, and the mechanics are trained at the Argentine Air Force's National Civil Aviation Institute.

Gendarmeria Nacional: This unit has its own aviation personnel. The crews for twin-engine aircraft consist of a pilot and a co-pilot and possibly a mechanic; the crews for single-engine aircraft consist of a pilot and possibly a mechanic.

The pilots receive their basic flight training from military personnel.

Prefectura Naval: This unit has its own aviation personnel (pilots and mechanics). For equipment maintenance, civilians are employed to assist regular navy personnel.

The pilots are trained at the Argentine Naval College.

AUSTRALIA:

South Australia: Crews of all aircraft in which prisoners are being transported consist of two pilots, one of whom acts as the prisoner escort.

There were five pilots in 1974, selected from police personnel who held private pilot's licences. They attended an approved flying school and spent a twelve-month probationary period flying in the company of senior pilots.

Other Australian States (Tasmania and Victoria): The crew on each flight includes a non-police civilian pilot and one or more police observers.

AUSTRIA:

The crew for each flight usually consists of a police pilot and one or more police observers. Police fixed-wing aircraft pilots receive their training from civilian aviation schools; helicopter pilots are trained by the Austrian Air Force. The other personnel are trained in aviation schools or receive on-the-job training for various tasks.

CANADA:

Ontario Provincial Police: Each crew consists of a civilian pilot with at least 300 hours of commercial flying experience, and one police observer.

New police observers are trained by experienced ones.

Montreal Urban Community Police: Each crew for the two helicopters used by this force consists of a pilot and an observer. One of the pilots in 1974 was a police officer who had a commercial pilot's licence and who had obtained a helicopter pilot's licence at his own expense. The other pilot was a non-police civilian. The observers are always police officers.

No specific training plans have yet been made.

Quebec Police Force: In most instances, each crew consists of a pilot seconded to the police force by the Provincial Ministry of Transport, and a police officer.

Royal Canadian Mounted Police: In most instances, each crew consists of one pilot and one engineer. The pilots are regular members of the R.C.M.P. who have at least commercial pilot's licences. The R.C.M.P. provides them with additional training.

FEDERAL GERMANY:

The Länd police force and the Federal Border Patrol helicopter crews consist of one pilot and one mechanic. An extra person is included as an observer on some flights.

The flight crews are composed entirely of police officers, but ground crews include government and civilian personnel as mechanics and equipment inspectors.

The Länd and Federal Border Patrol flight crews are trained at the Border Patrol Flight School, partly by military instructors and partly by private companies. Private commercial organisations provide advanced training for flight crew members and technical training for ground crew members.

FRANCE:

The crew can vary according to the type of mission to be conducted. Usually, the crew consists of a pilot and a mechanic with first-aid training accompanied, as circumstances warrant, by observers, photographers, or doctors.

Most of the flight personnel are police officers, but some come from the National Civil Defence Service and some are civilian employees.

Government personnel with prior training (holders of military pilot's or aircraft mechanic's licences or other appropriate military qualifications, or civilian licences) are used. They take advanced training courses.

INDONESIA:

Each crew includes a pilot, a co-pilot, and a flight engineer, all of whom are police officers since the Indonesian Police have their own aircraft personnel. They are trained at the Indonesian Aviation Academy, by the Indonesian Air Force, or in the United States (Miami and Los Angeles).

ISRAEL:

The private companies from which the aircraft are rented supply the necessary crews.

JAPAN:

The crews vary according to the type of helicopter to be used. They consist of either one pilot alone, or two pilots alone, or two pilots with a mechanic and a radio engineer, all of whom are police officers.

MEXICO:

The crew is composed entirely of police officers, usually a pilot and observers.

The crew members are trained either in Mexico or outside the country.

NIGERIA:

Each helicopter crew includes a private pilot and a Senior Police Officer. The crew of the Cessna 310 consists of private pilots and a Senior Police Officer.

NORWAY:

The police have neither their own aircraft nor their own crews. The crews vary according to the type of aircraft to be used: for example, 1 pilot and 1 mechanic for the DHC3, the Cessna 206, and the Piper Aztec planes, or 2 pilots and 1 mechanic for the UH1B and DHC6 places, or 8 persons including 2 pilots, for the P3B Orion.

SWEDEN:

Each crew is usually composed of two police pilots. Sometimes - particularly in the summer - civilian and military pilots are called in as reinforcement personnel.

Police officers who have successfully completed a six-month training program at the Swedish Air Force Flight Training Centre and a four-month program at the Swedish Army Helicopter Training Centre then receive special training in police tactical flying for about two months.

THAILAND:

The Thai Police Department has its own flight personnel. The crews vary according to the size and type of aircraft to be used, as follows:

- 5 crew members (1 pilot, 1 co-pilot, 2 mechanics, and 1 operator) for large fixed-wing aircraft;
- 4 crew members (1 pilot, 1 co-pilot, and 2 mechanics) for medium-sized fixed-wing aircraft;
- 2 or 4 crew members (1 or 2 pilots and 1 or 2 mechanics) for small fixed-wing aircraft;
- 4 crew members (2 pilots and 2 mechanics) for large helicopters;
- 2 crew members (1 pilot and 1 mechanic) for small helicopters.

Thai Police aircraft personnel are trained at the Police Aviation School.

UNITED KINGDOM:

Each crew usually consists of a civilian pilot and a police observer. The London Metropolitan Police also include a ground unit liaison officer for certain criminal intelligence operations.

The London Metropolitan Police observers are trained by other qualified observers. Occasionally an observer attends an Air Force or Army Observer Training Course.

UNITED STATES:

Chicago Police Department: Each crew usually consists of two pilots, both of whom are sworn police officers and one of whom acts as an observer.

Maintenance is done by a fixed base operator under contract to the Department.

Pilots are trained by members of the unit who are instructors.

Los Angeles County Sheriff's Department: All crew members are sworn police officers. The crew for the Sikorski S-58 consists of two pilots, one crew chief, and two medical aides; each patrol aircraft is crewed by one pilot and one observer; the crews for the other types of aircraft consist of one pilot and a passenger and/or observer.

Most of the pilots were trained by police instructors, but some of them received their training from the military services or from commercial operators.

New York City Police Department: Each crew usually consists of a pilot and an observer.

All the flight personnel are police officers.

All the pilots have commercial pilot's licenses, but transition training is conducted by unit flight instructors; maintenance personnel all have had previous experience before they were assigned to the unit, and they are sent for additional training to the aircraft manufacturers' schools.

VENEZUELA:

Military pilots are used, and each helicopter crew includes two pilots; however, crews vary according to the kind of mission to be undertaken.

SPECIAL DEPARTMENTS: ORGANISATION AND DUTIES

ARGENTINA:

The Policía Federal, the Gendarmería Nacional, and the Prefectura Naval all have special departments responsible for aviation facilities.

Within the Gendarmería a special Division Aviacion organises and co-ordinates all airborne operations, handles personnel management, and has responsibility for using, maintaining, and repairing the unit's installations.

AUSTRALIA:

In South Australia, an "Aviation Section" has been formed for police flying operations, which consist almost exclusively of police and prisoner transportation (95% of the total flight hours logged).

The Aviation Section includes five pilots; the section does not have responsibility for maintenance of ground installations or equipment.

AUSTRIA:

The Federal Ministry of the Interior's "Division 27" is in charge of aviation facilities available to the police and the gendarmerie.

Division 27 has many responsibilities: assisting the police force with airborne operations; providing assistance to lifesaving services; training certain categories of aviation personnel; assistance in drafting and ensuring the enforce-

of aviation regulations and laws; management, maintenance, and repair of aircraft for the Federal Ministry of the Interior and for other authorities.

Aircraft and aviation personnel are assigned to six bases - one each in Vienna/Meidling, Salzburg, Innsbruck, Klagenfurt, Graz and Moheems-Dornbirn.

Maintenance of the helipad at Vienna/ Meidling is entirely the responsibility of police personnel.

CANADA:

Within the Ontario Provincial Police, the "Field - Traffic Divisions" are the departments in charge of aviation facilities.

The Montreal Urban Community Police does not have a special aviation section; the Transportation and Communications Section is in charge of helicopter operations, and it assigns missions and records flight hours logged in accomplishing them. The company from which the helicopters are rented is responsible for their maintenance.

The Royal Canadian Mounted Police has an Air Service Branch composed of a Director, an Air Services Officer West, and Air Services Training Officer who also holds the post of Air Services Officer East, a Chief Aircraft Technician, and East and West Technical Supervisors, in addition to pilots and base engineers.

The Director is responsible for planning, organizing and financing all air operations.

FEDERAL GERMANY:

There are no special departments in charge of aviation facilities within the police forces of the various Federal German Länder. Helicopter squadrons come under the jurisdiction of each individual Land's Ministry of the Interior or are directly controlled by the Governor of each Land.

The Aviation Section of the Federal Border Patrol is responsible for the Border Patrol's helicopter squadrons. It arranges flights, guides aircraft in flight during missions, controls overall flight patterns, and provides aviation training for Border Patrol and Land police officers. The Aviation Section has a permanent headquarters, a headquarters and training squadron, central hangar facilities, maintenance hangars, and four operations squadrons.

INDONESIA:

Within the Indonesian National Police, the "Sea & Air Police Corps" is the unit in charge of air facilities and aviation personnel.

The unit is responsible for flight control and for maintenance (periodic inspection and repair) of the aircraft used.

MEXICO:

There is a special department within the Mexican Police Force which is in charge of aviation facilities and personnel. It includes an Air Services Chief, an Operations Chief, and a Maintenance Chief.

NIGERIA:

There is an air operations unit within "B Department" of the Nigerian Police; it is responsible for general highway patrol operations.

SWEDEN:

The National Swedish Police Board directs all police air operations. The Head of Aircraft Operations has responsibility over two police divisions, one of which conducts actual air missions.

UNITED KINGDOM:

The "AB" Department at New Scotland Yard is responsible for the Metropolitan Police Helicopter Unit's policy planning and operations.

UNITED STATES:

The Chicago Police Department has a Helicopter Unit under the supervision of a police lieutenant. He, five pilots and an observer compose the unit, which is part of the Special Operations Group of the Department's Patrol Division.

Within the Los Angeles County Sheriff's Department Patrol East Division, there is an "Aero Bureau" for controlling the use of aircraft. There is a staff of mechanics (numbering 10 in 1974) for maintaining police aircraft.

Since 1929, the New York City Police Department has had an Aviation Unit, based in Brooklyn, N.Y., operating under the command of the Special Operations Division. The unit's primary responsibility is to support the activities of the Patrol Force. The unit repairs and maintains the aircraft in accordance with Federal Aviation Administration regulations.

VENEZUELA:

The Departamento Aéreo de la Policía Metropolitana plans, co-ordinates, carries out and supervises all air operations. It is also responsible for maintaining its own helicopters and aircraft.

Radio contacts between aircraft in flight and ground services are obtained in all countries by use of radio equipment installed in the aircraft and occasionally by portable radio equipment. Contact is thus ensured with the police headquarters involved, with ground patrol vehicles in the area, and with civil aviation authorities in some cases (such as the contacts with the airport control towers in Montreal, Chicago, and Los Angeles).

ADDITIONAL DATA

The authorities in countries where the police forces use aircraft are satisfied with the results obtained and consequently believe that, overall, the expenses involved are justified.

Moreover, the police forces (ARGENTINA, the states of Victoria and South Australia in AUSTRALIA, AUSTRIA, the Quebec Police Force in CANADA, FEDERAL GERMANY, FRANCE, INDONESIA, MEXICO, THAILAND, the London Metropolitan Police in the UNITED KINGDOM, the UNITED STATES, and VENEZUELA) plan to increase their airborne operations.

In AUSTRALIA, the Northern Territory Police Force is especially satisfied with the use of aircraft, inasmuch as the distances involved and the climatic conditions make other means of transportation unsuitable. In South Australia, police air transportation costs totalled 24,900 Australian dollars in 1973, whereas the cost would have been 43,000 dollars if surface transportation had been used; in addition, a saving of 8600 man-hours was realized. The South Australian police authorities believe that leasing a second aircraft could be advantageous for use in emergency situations.

The police authorities in AUSTRIA believe that aircraft have become indispensable for ensuring domestic order, co-ordinating road traffic, and conducting rescue operations in mountainous regions.

In CANADA, about 98% of the flight hours logged by the Ontario Provincial Police in 1973 were devoted to road traffic surveillance and regulation. The Montreal Urban Community Police helicopters have proved especially useful for pursuing criminals and combating highway hijackings. The Quebec Police Force has obtained very satisfactory results from the use of helicopters for crime prevention and for searches and rescues; the Quebec police authorities intend to have fixed-wing aircraft available for similar operations. The Royal Canadian Mounted Police Authorities are especially satisfied with the speed and security available through the use of aircraft for prisoner transport.

In FEDERAL GERMANY, aircraft use - to give but one example - enabled the police of one German Länd to bring 124 incidents, of a total 226, to satisfactory conclusions. The lives of many persons have been saved by the use of aircraft.

Throughout Federal Germany, police use of aircraft for a variety of operations - road traffic regulation, manhunts, crowd control, waterway surveillance, environmental protection - has generally yielded satisfactory results.

The Federal German Border Patrol intends to use aircraft to enhance its lifesaving operational capacities.

The authorities in FRANCE have reported that the use of aircraft has been effective for observing and checking on road traffic, crowds, shorelines and waterways, and for lifesaving. The French police intend to use aircraft for patrolling national borders and for upgrading their aerial photography operations, which will include the use of television equipment.

The INDONESIAN police force has found the use of aircraft to be especially helpful in checking on highway traffic and in searches. The authorities are contemplating using aircraft for crowd surveillance, for combating illicit trafficking, and for patrolling and defending the country's coastlines.

The authorities in ISRAEL, MEXICO, NIGERIA, SWEDEN, and the UNITED KINGDOM have reported that the use of aircraft has been especially advantageous for road traffic control operations. All except those of Nigeria indicated they have used aircraft to advantage in search operations, and the London Metropolitan Police are reportedly planning to use helicopters for flood and disaster relief and for fire and other emergencies in high-rise buildings.

In NORWAY, the large distances, scattered population and long coastline have made the use of aircraft indispensable.

In VENEZUELA, the Cuerpo Técnico de Policía Judicial is developing plans to increase its use of aircraft along present lines and to extend that use to include transportation of VIPs, investigative teams, and even prisoners.

**
** **

A P P E N D I X

FEDERAL GERMANY

Aircraft Used by the Police Forces of the Various Länder
and the Federal German Border Patrol

CHARACTERISTICS AND PERFORMANCES DATA

	<u>"A l o u' e t t e"</u>		<u>"G a z e l l e"</u>
	II	III	
Empty weight	1020 kg.	1110 kg.	980 kg.
Maximum useful load *	230 kg.	990 kg.	820 kg.
Maximum authorised take-off weight	1650 kg.	2250 kg.	1800 kg.
Airspeed (approx.)	160 km/h.	210 km/h.	260 km/h.
Seats	4	7	5
Endurance (approx.)	4 hrs.	3 hrs.	3 hrs. 15 min.
Range (approx.)	640 km.	630 km.	800 km.

* "Maximum useful load": crew, passengers, cargo and fuel.

MBB - BO 105 C (Bölkow)

2 405-horsepower gas turbine engines
Maximum seating: 5 persons.
Maximum authorised take-off weight: 2.3 tons.
Service ceiling: 5030 meters.
Fuel capacity: 530 litres.
Fuel consumption: 180 litres.

Bell UH1D

- 1) Category : light transport helicopter.
- 2) Maximum authorised
take-off weight: 4130 kg.
- 3) Airspeed 110 knots.
- 4) Take-off power 1100/1400 horsepower
- 5) Passengers (including crew): ... 15 persons
- 6) Endurance : 4 hours 20 minutes

Bell 212

- 1) Category : light transport helicopter
- 2) Maximum authorised
take-off weight 5096 kg.
- 3) Airspeed 110 knots
- 4) Take-off power 2 x 900 horsepower
- 5) Passengers (including crew) ... 15 persons
- 6) Endurance 2 hours 45 minutes

SA 330 Puma

- 1) Category medium transport helicopter
 - 2) Maximum authorised
take-off weight 6700 kg.
 - 3) Airspeed 130 knots
 - 4) Take-off power 2 x 1430 horsepower
 - 5) Passengers (including crew) ... 21 persons
 - 6) Endurance 3 hours 10 minutes
-

END