Document disclosed under the *Access to Information*
Document divulgué en vertu de la *Loi sur l'accès à l'informat*

VOL. 3

5002 - 715

FILE NO. 5002 - 715 VOLUME NO. 3

# DEPARTMENT OF TRANSPORT

FROM JAN. 1, 1970
TO

*IMPORTANT* — NOTIFY RECORDS WHEN FILE IS PASSED DIRECT TO ANOTHER SECTION

SUBJECT AIRCRAFT
SUB-SUBJECT ACCIDENTS - GENERAL
FILE TITLE CF-WMO FAIRCHILD HILLER FH-1100 PAR F.R. FLETCHER APPROX. 3 MI. N. OF FREEWAY NEAR JACKMAN RD. ALDERGROVE

| (1) DATE LEFT RECORDS | (2) PURPOSE FOR WHICH REFERRED (IF PURPOSE FOR WHICH REFERRED CANNOT BE EXPRESSED IN ONE LINE ADD MEMO TO FILE AND ENTER HERE "WITH MEMO") | (3) REFER FILE TO | (4) ENTER DATE TO BRING FORWARD WHEN REQUIRED | (5) USER'S INITIAL TO SHOW ACTION COMPLETED |
|---|---|---|---|---|
| MAY 13 1970 JUN - 2 1970 | B.F. MAY 14 1970 4435 | CA - WJ | ~~10 6 70~~ 19 | WJ |
| | 27582 | CA ① | ~~4 7 70~~ 25 | WJ |
| JUN 4 1970 | also dom Vol 2 attached | CAI ② | | BL |
| JUN - 9 1970 | B.F. JUN 10 1970 | CA WJ | | WJ |
| JUL 6 1970 | B.F. JUL 3 1970 | CA WJ | ~~15 8 70~~ 28 | WJ |
| AUG 13 1970 | B.F. AUG 14 1970 | CA WJ | ~~15 9 70~~ | WJ |
| DEC 29 1970 | 59164 | CAI | | MM |

CONFIDENTIAL

DORMANT

DORMANT

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

THIS COVER MUST NOT BE FOLDED UNDER FILE

CORRESPONDENCE TRANSFER AND CROSS-INDEX

| SUBJECT | FILE NUMBER | INITIALS |
|---|---|---|
| | | |
| | | |
| | | |

Document disclosed under the *Access to Information A*
Document divulgué en vertu de la *Loi sur l'accès à l'informati*

DEPARTMENT OF TRANSPORT
MINISTÈRE DES TRANSPORTS

IF UNDELIVERED RETURN TO POINT OF MAILING
EN CAS DE NON-LIVRAISON RENVOYER À L'EXPÉDITEUR

OFFICE AT _____
BUREAU DE

02-0045 (65)

ON HER MAJESTY'S SERVICE
SERVICE DE SA MAJESTÉ

CANADA
POSTAGE PAID
PORT PAYÉ

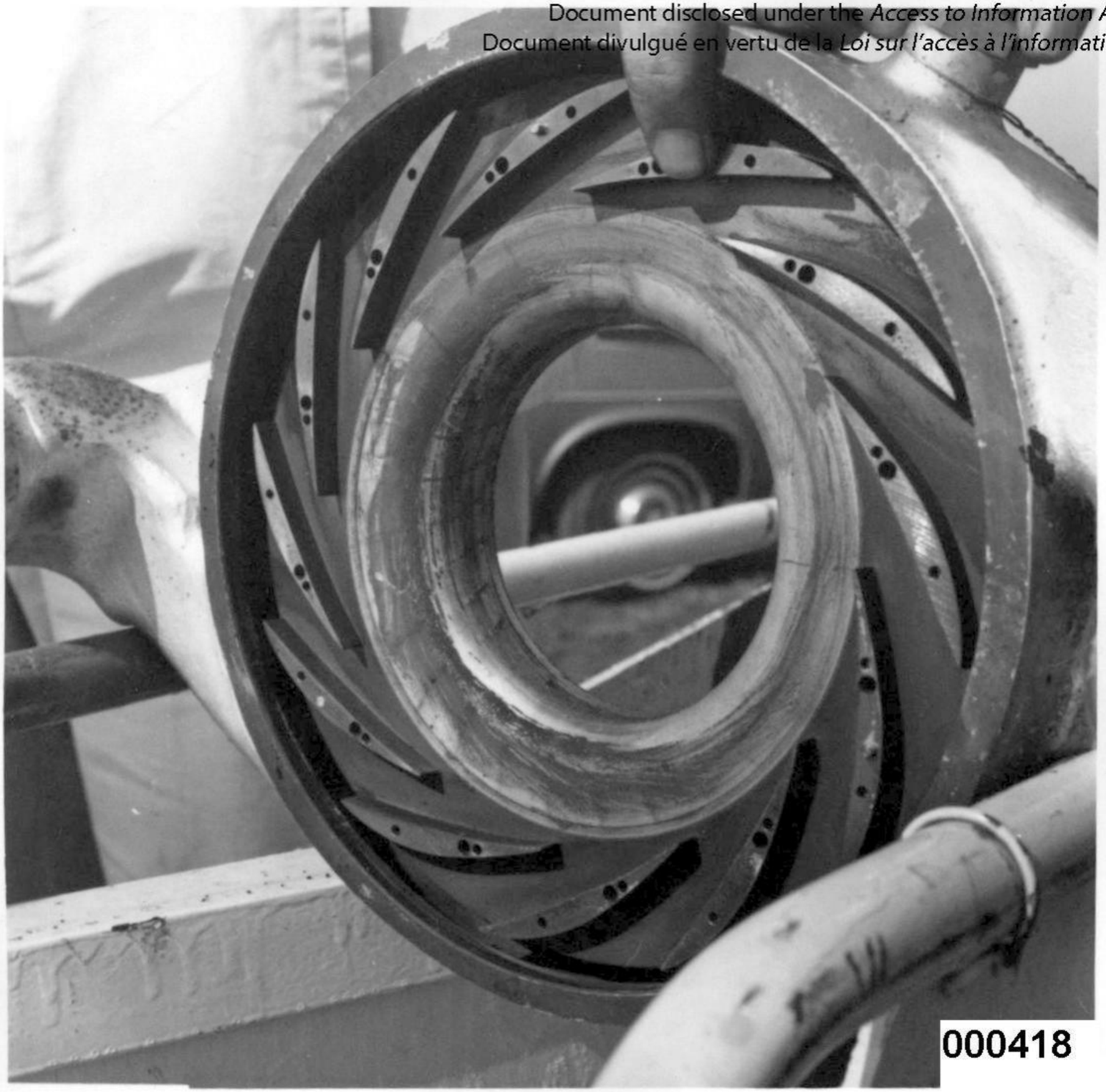
000416

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



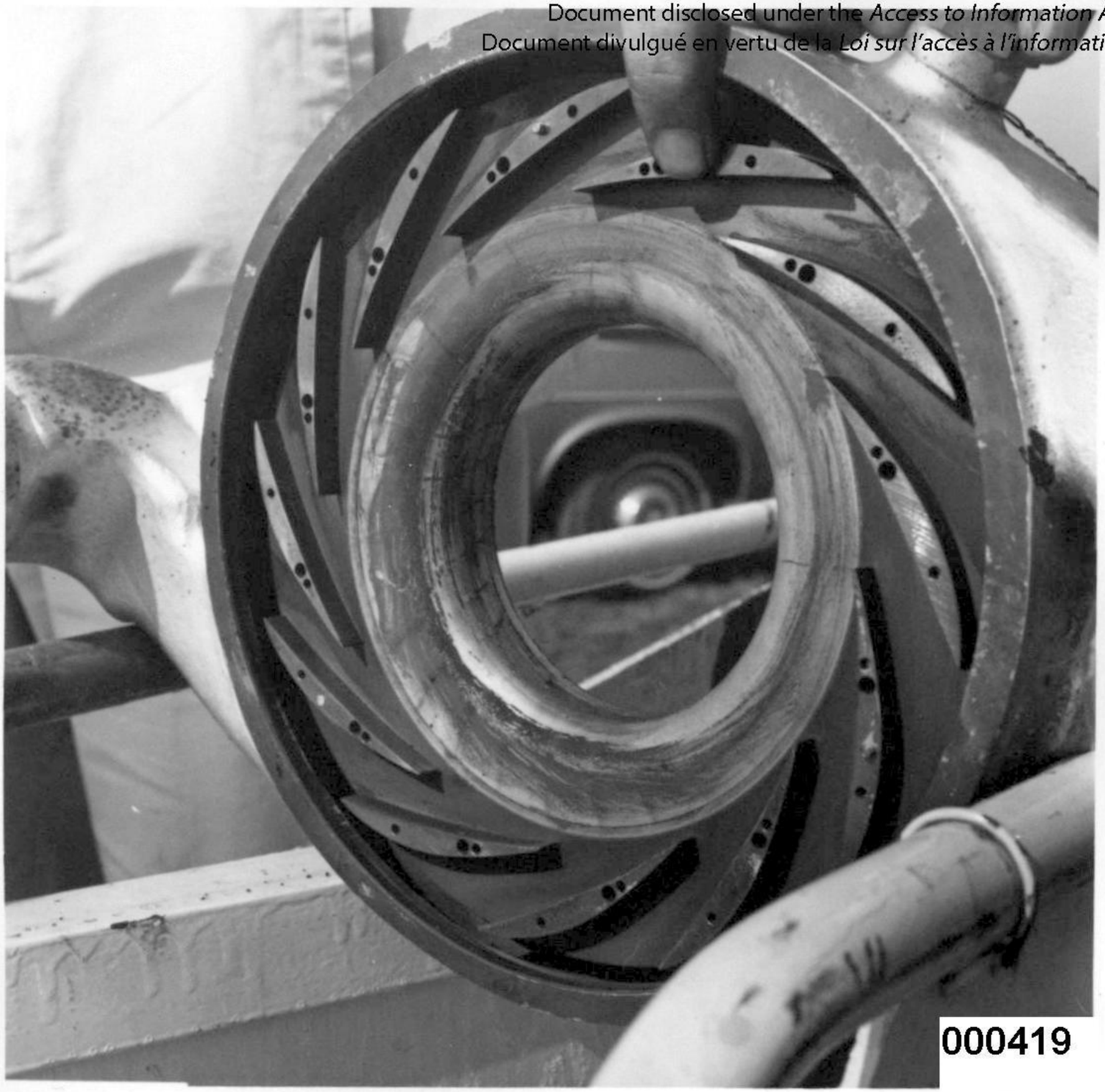
000417

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



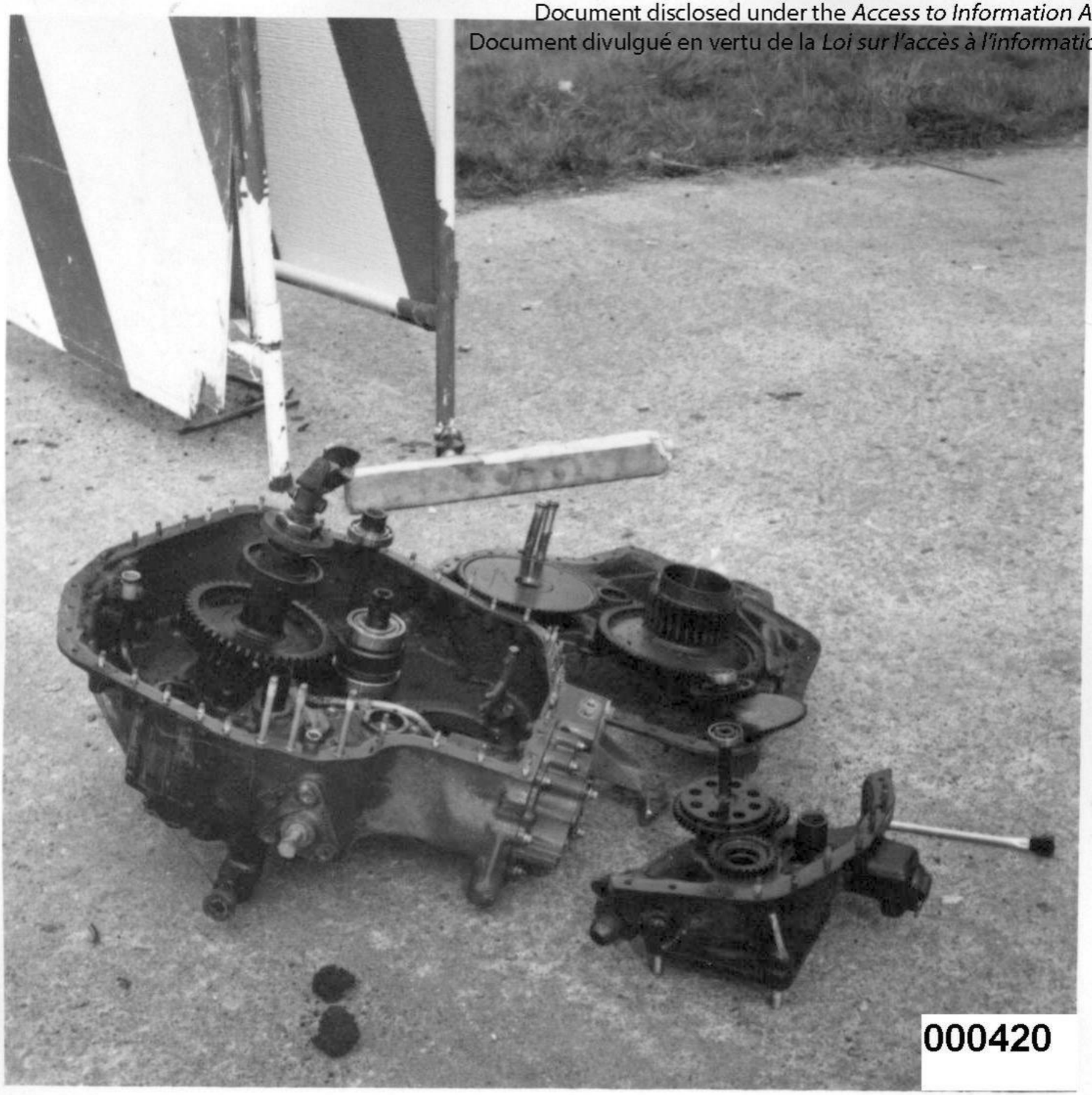
000418

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



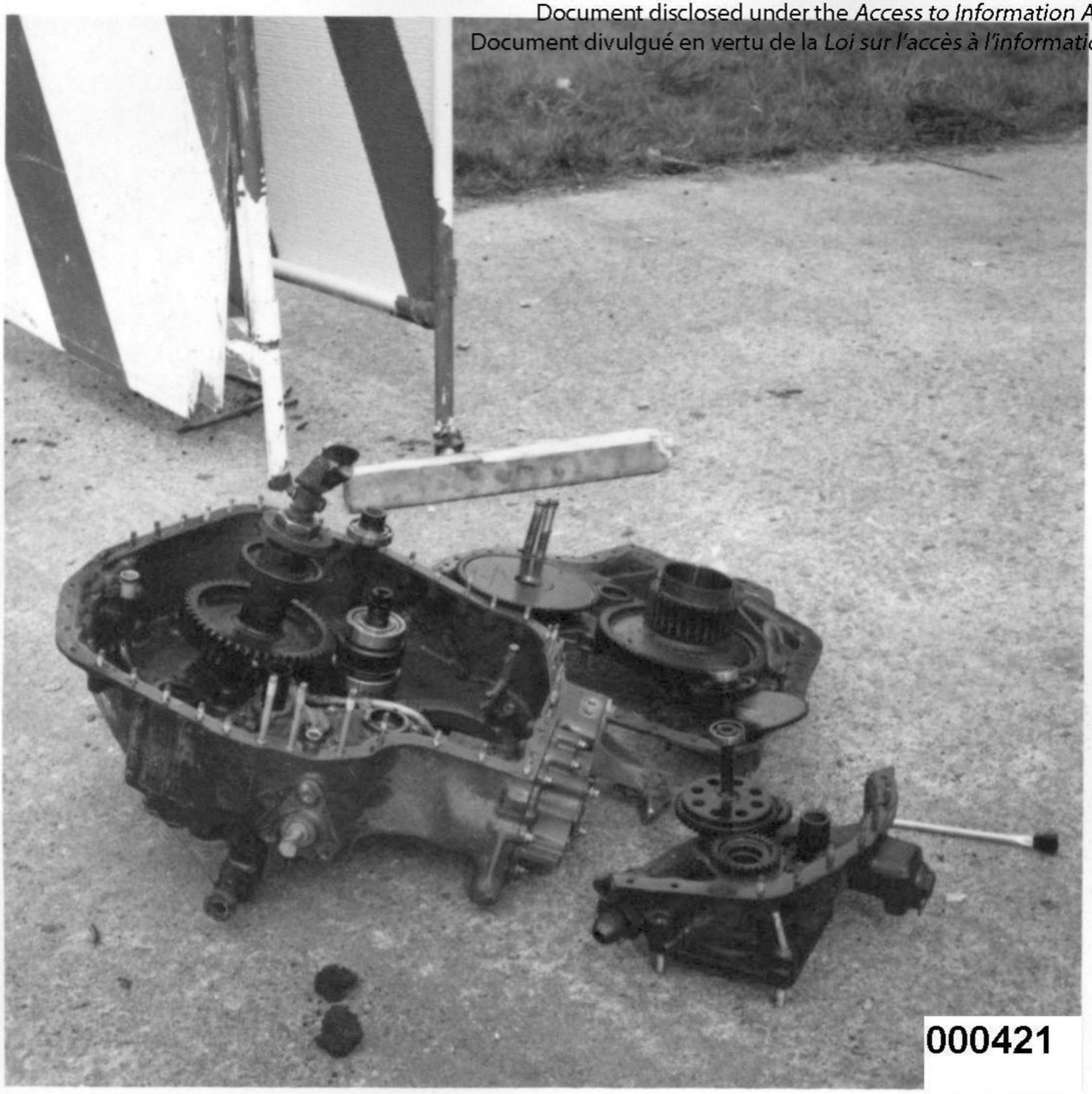
000419

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

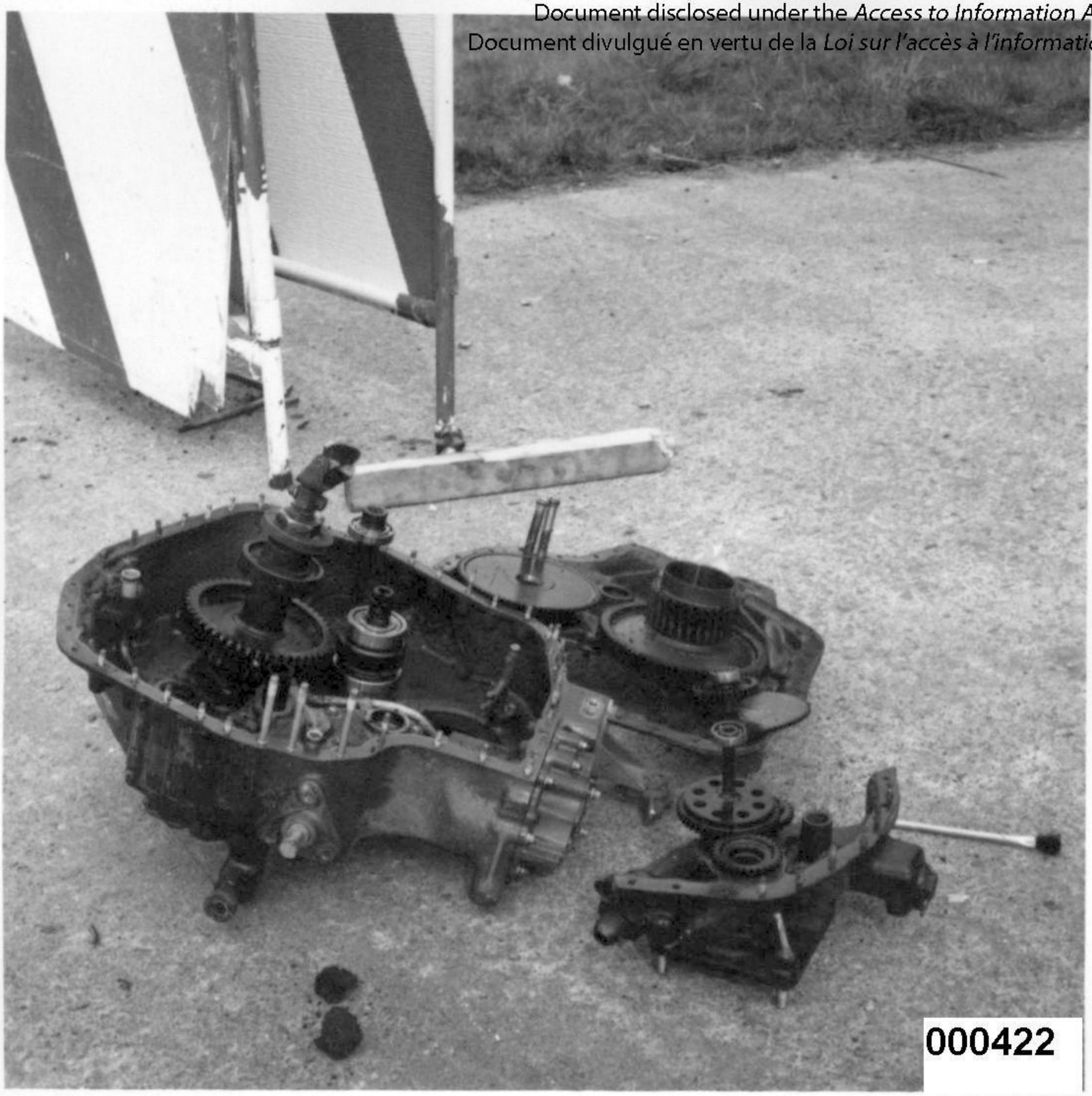


000420

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

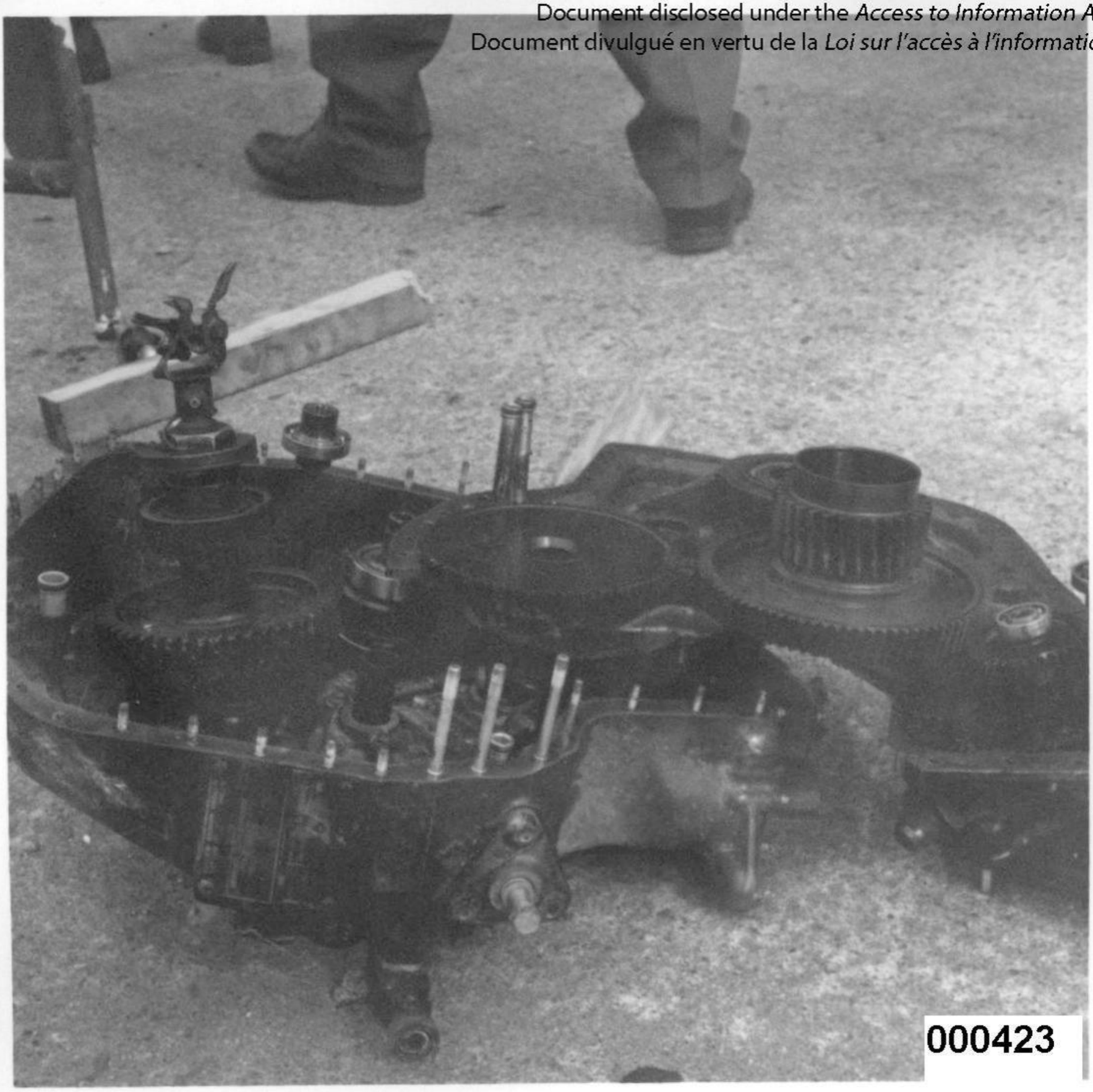


Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

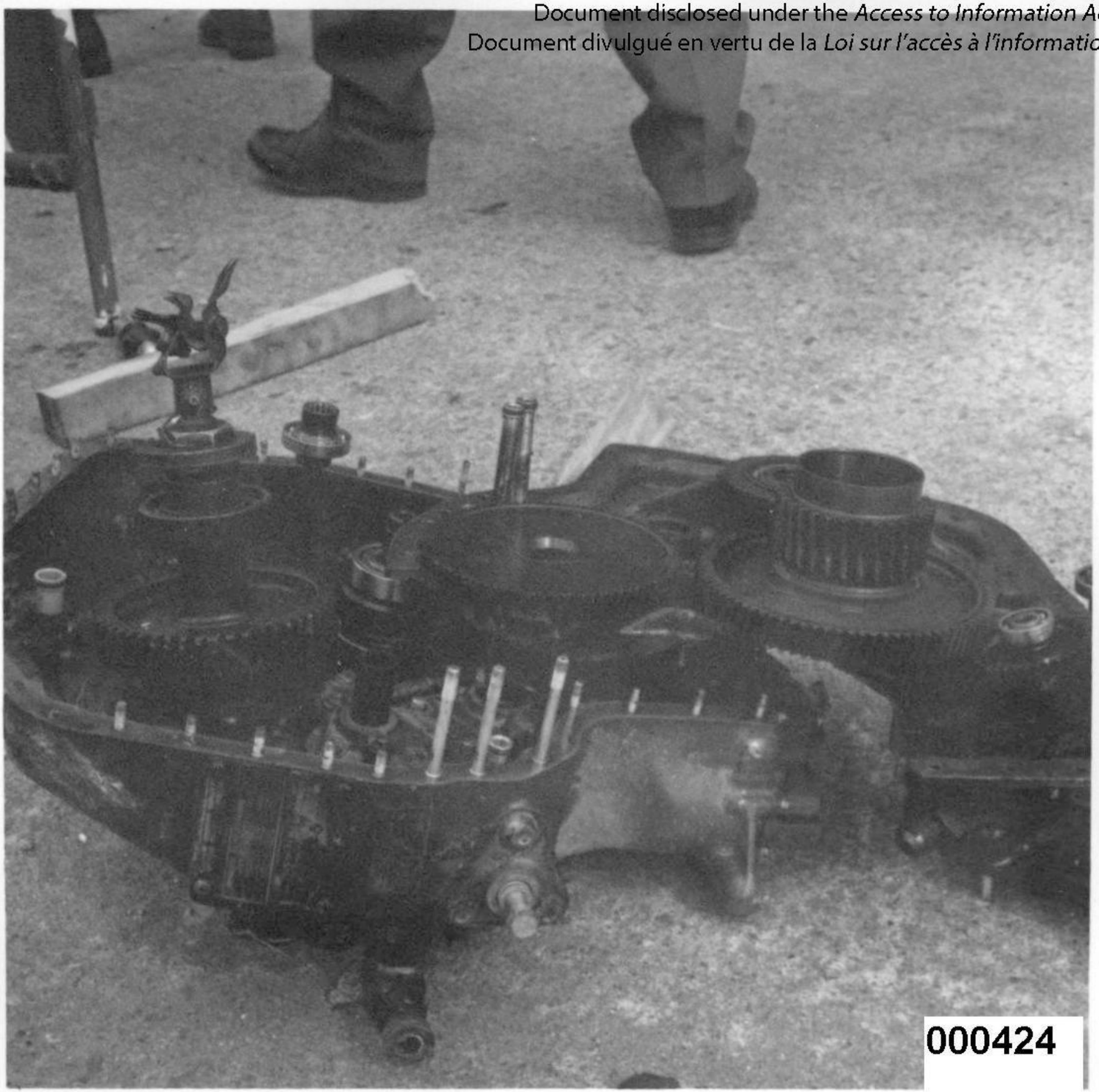


000422

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

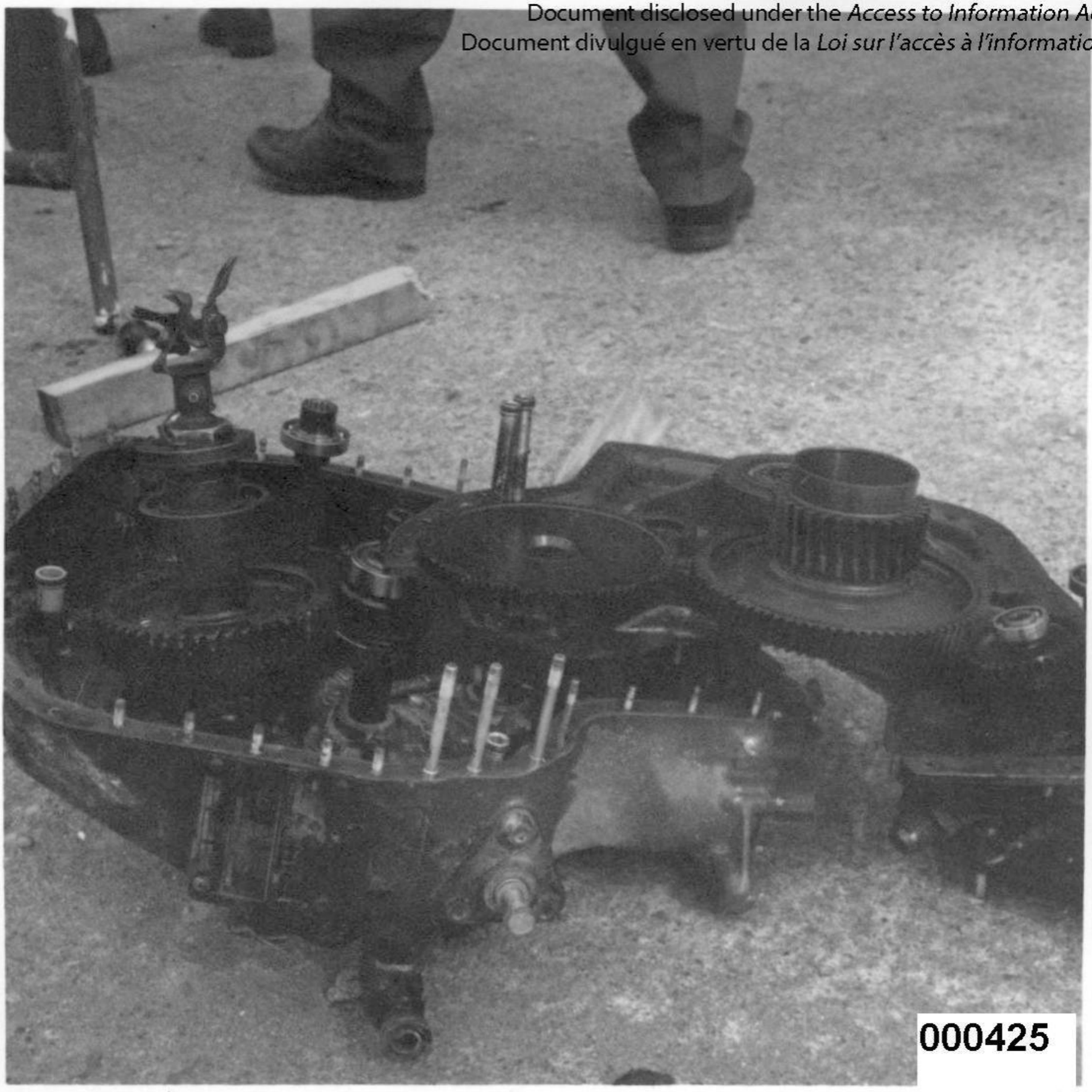


Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000424

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000426

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

14


000428

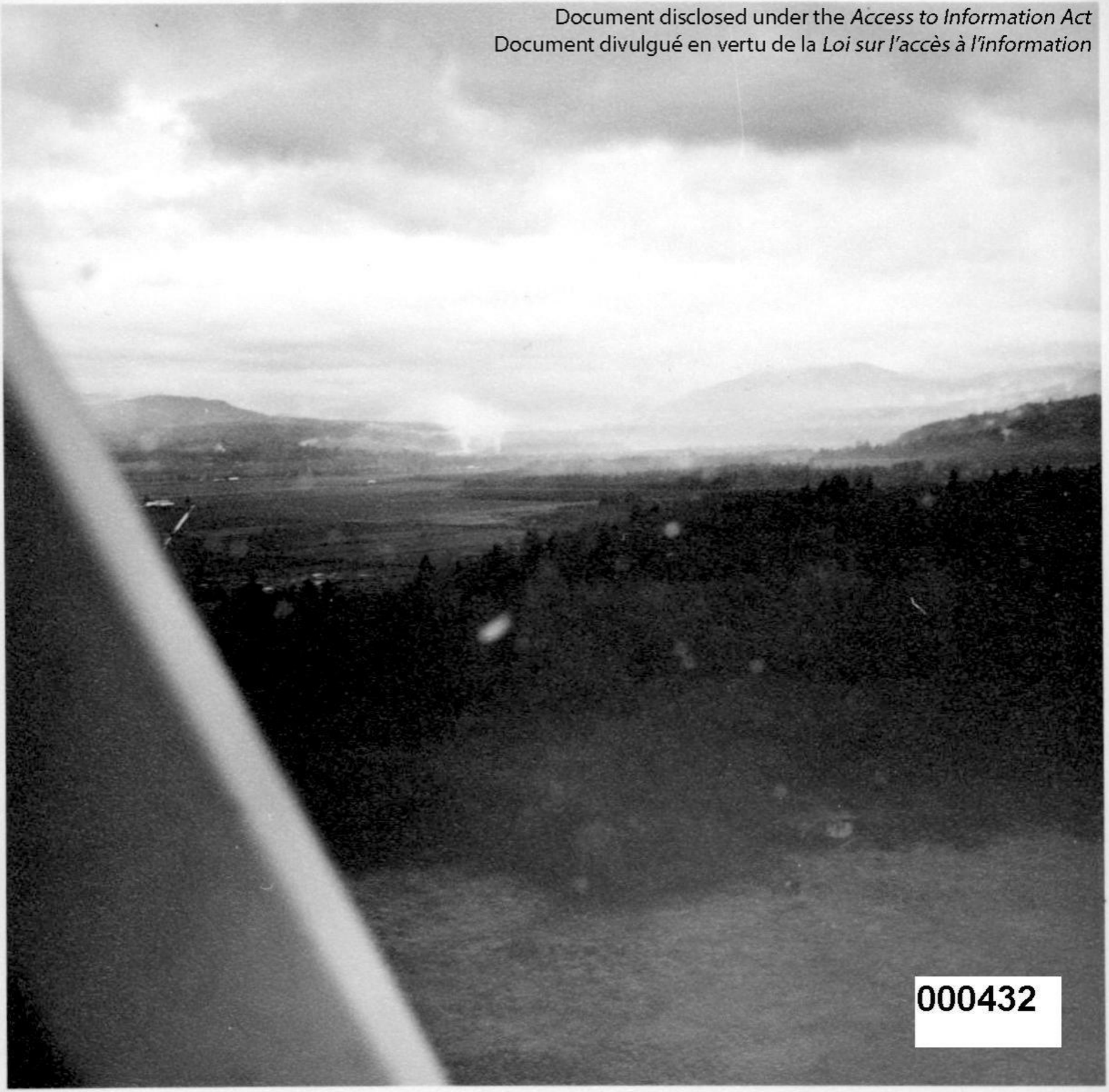
Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*


000430

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

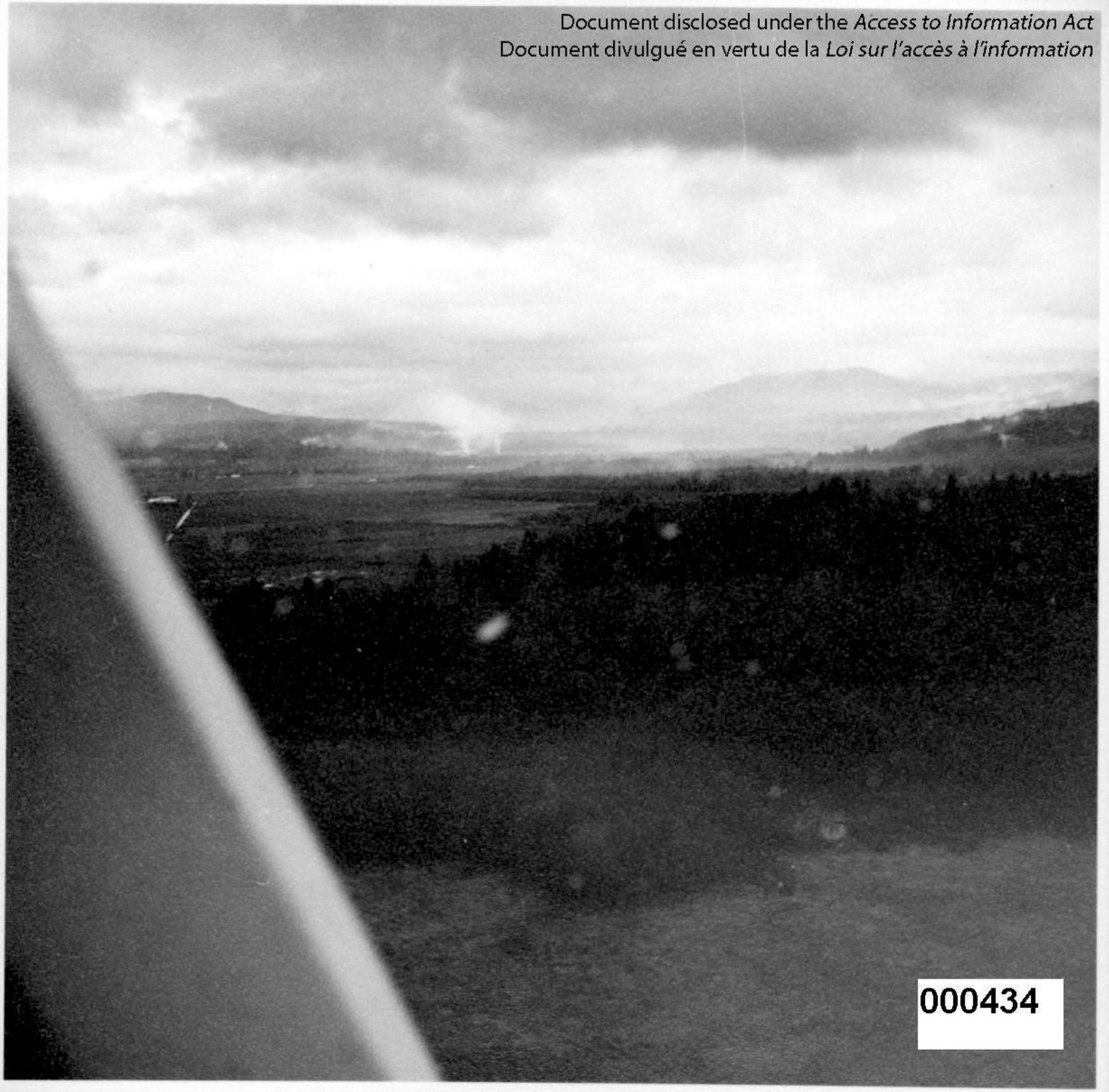
14

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

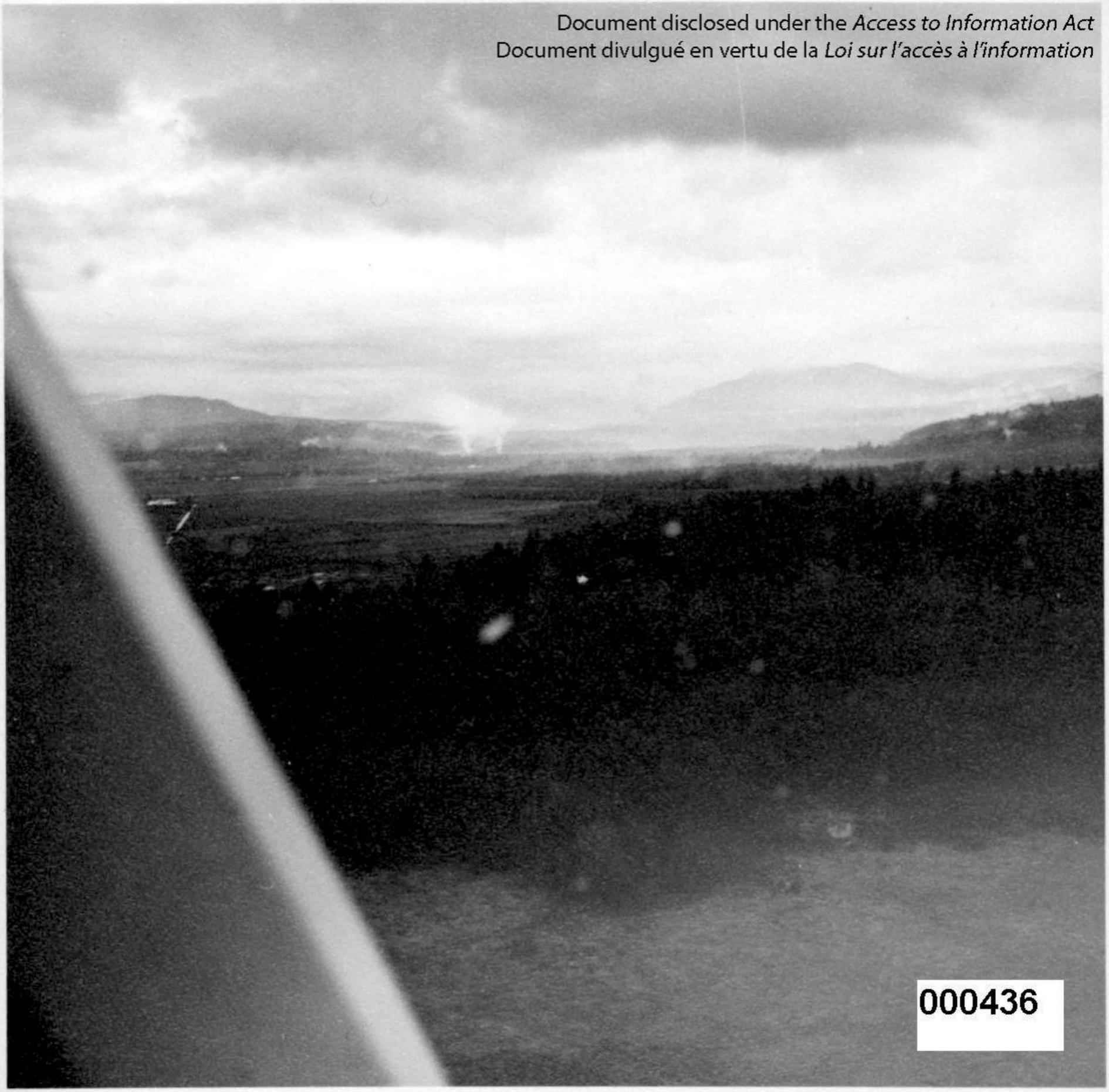


000434

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

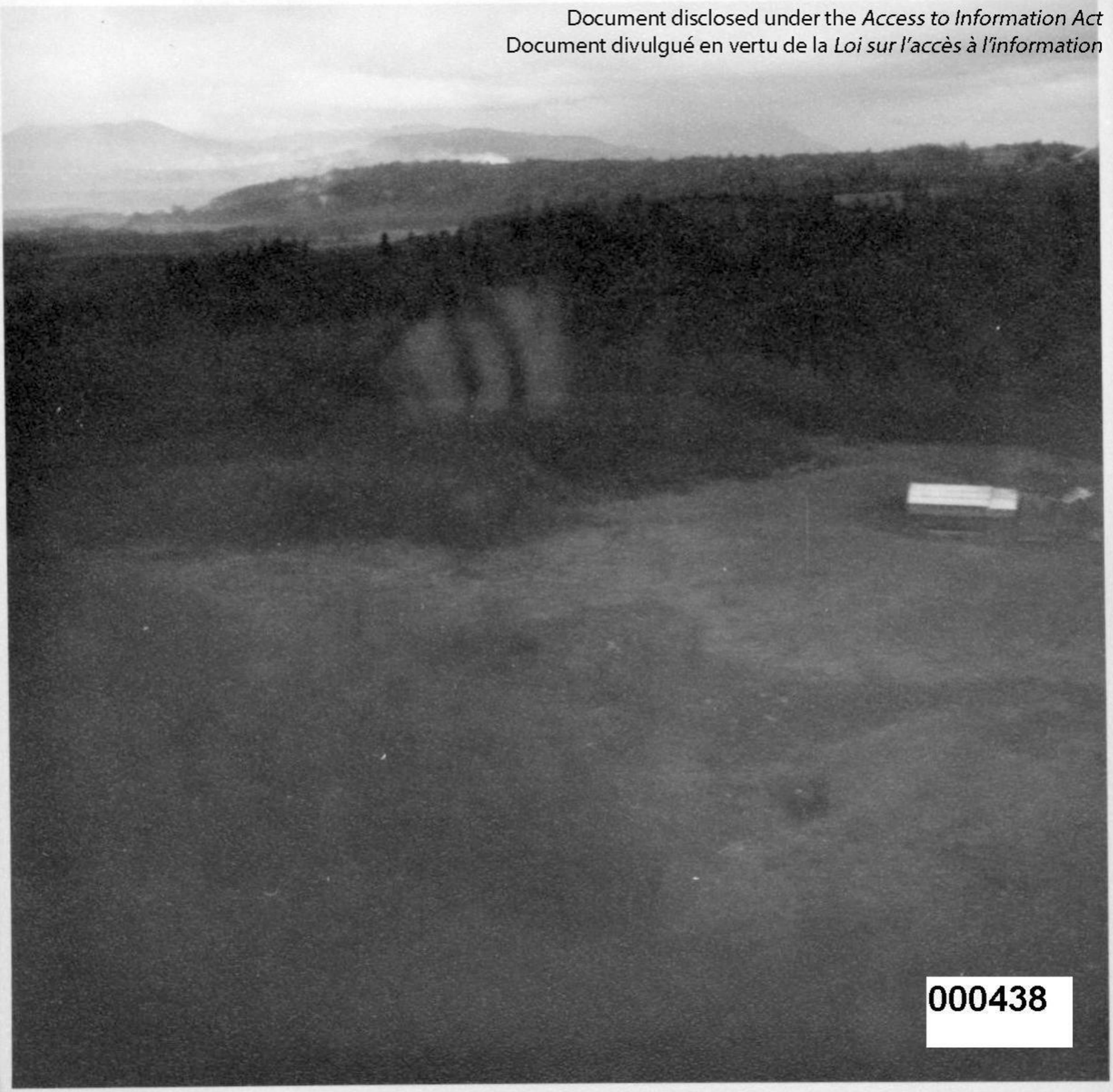
14

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



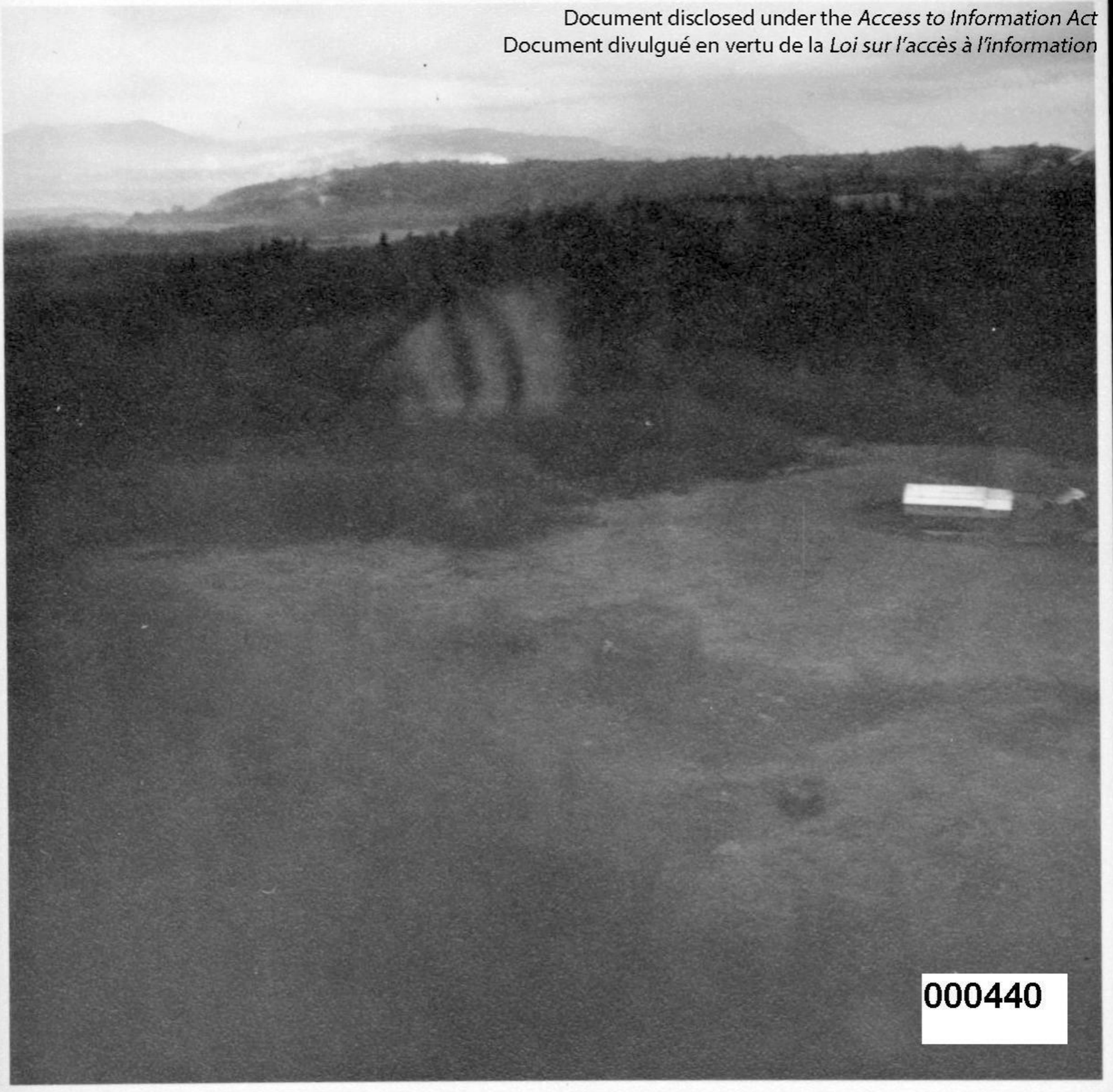
Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

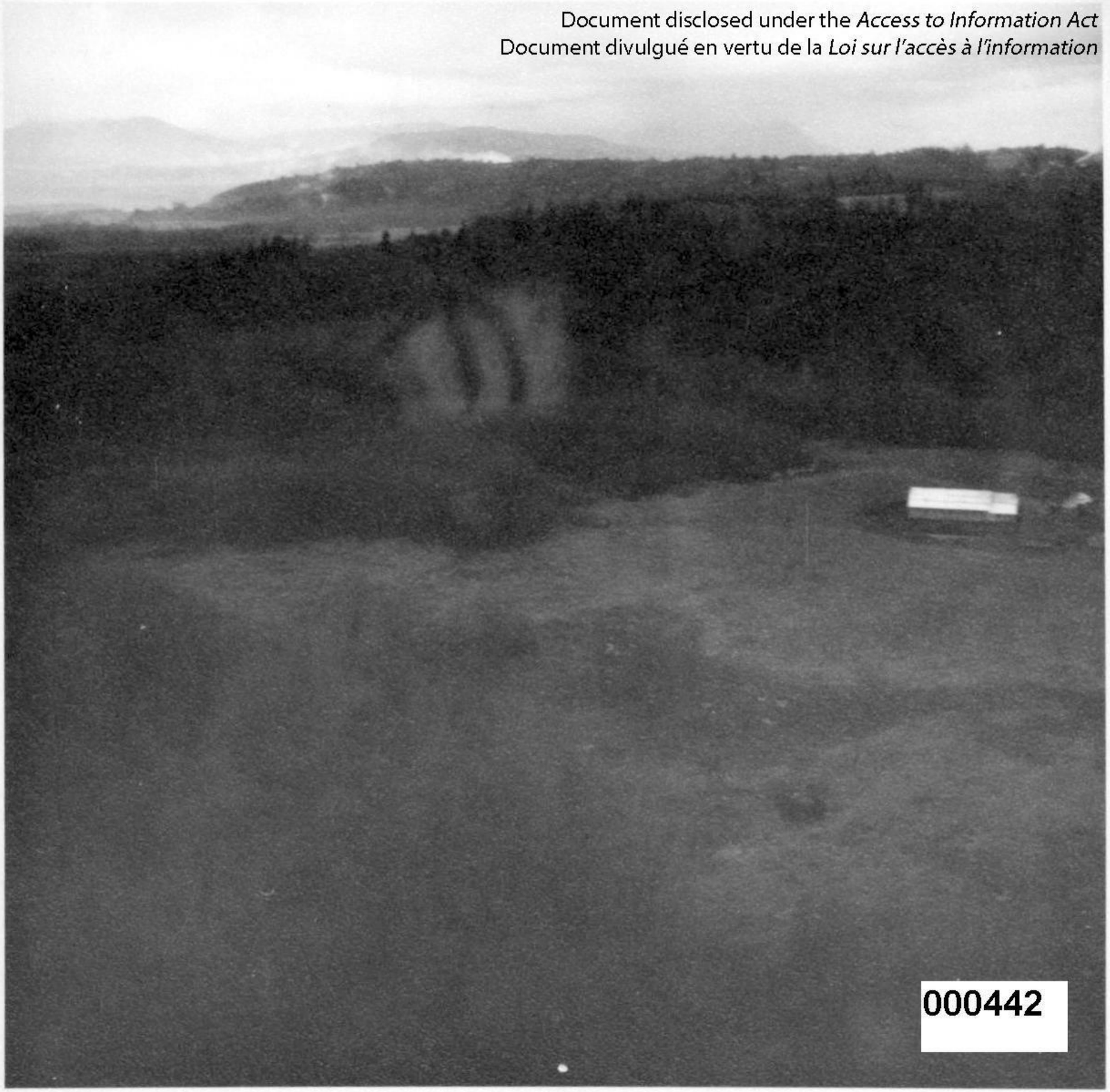
Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000440

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

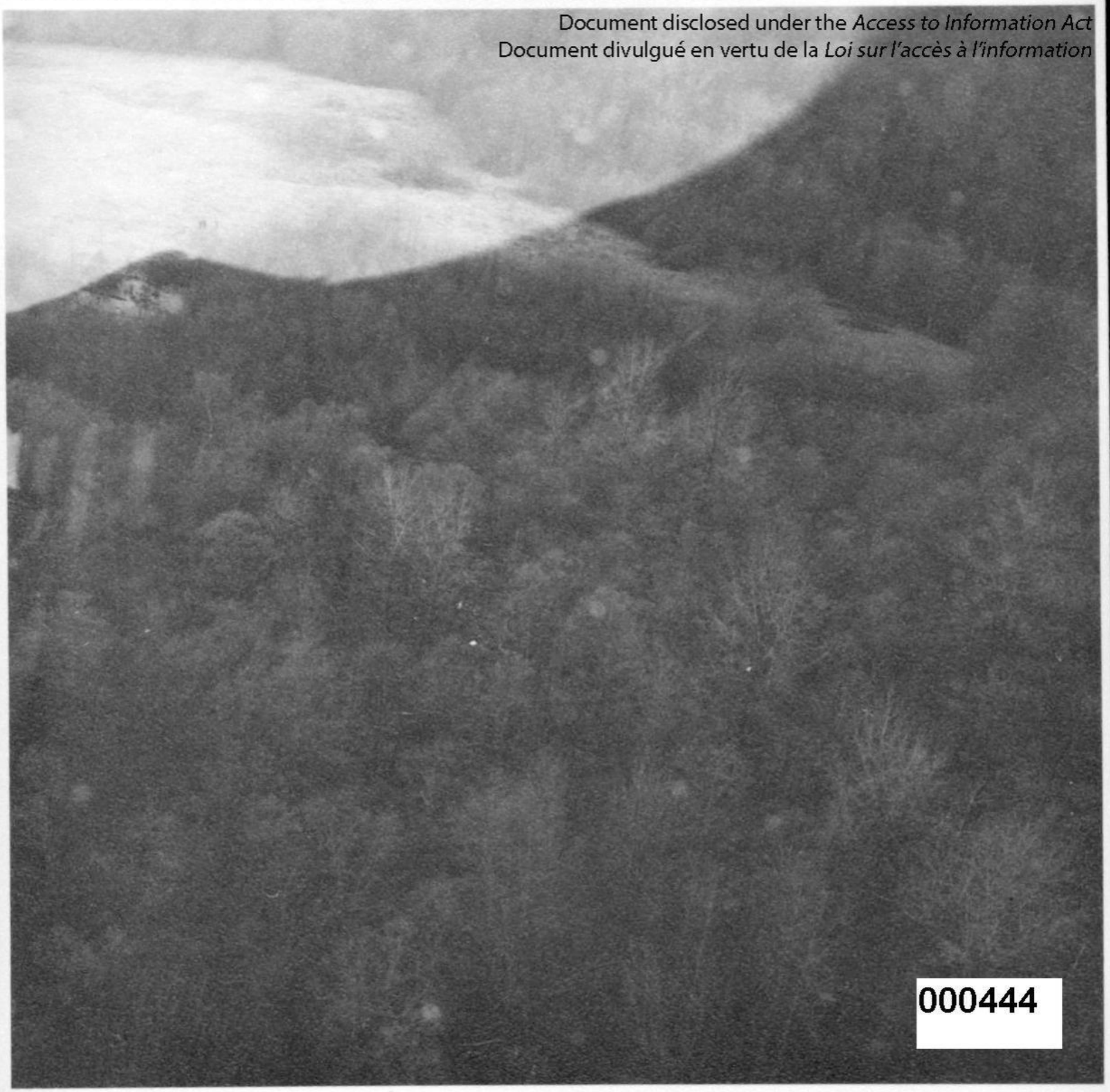


000442

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

14

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000444

Document disclosed under the *Access to Information Ac*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

1 of 4

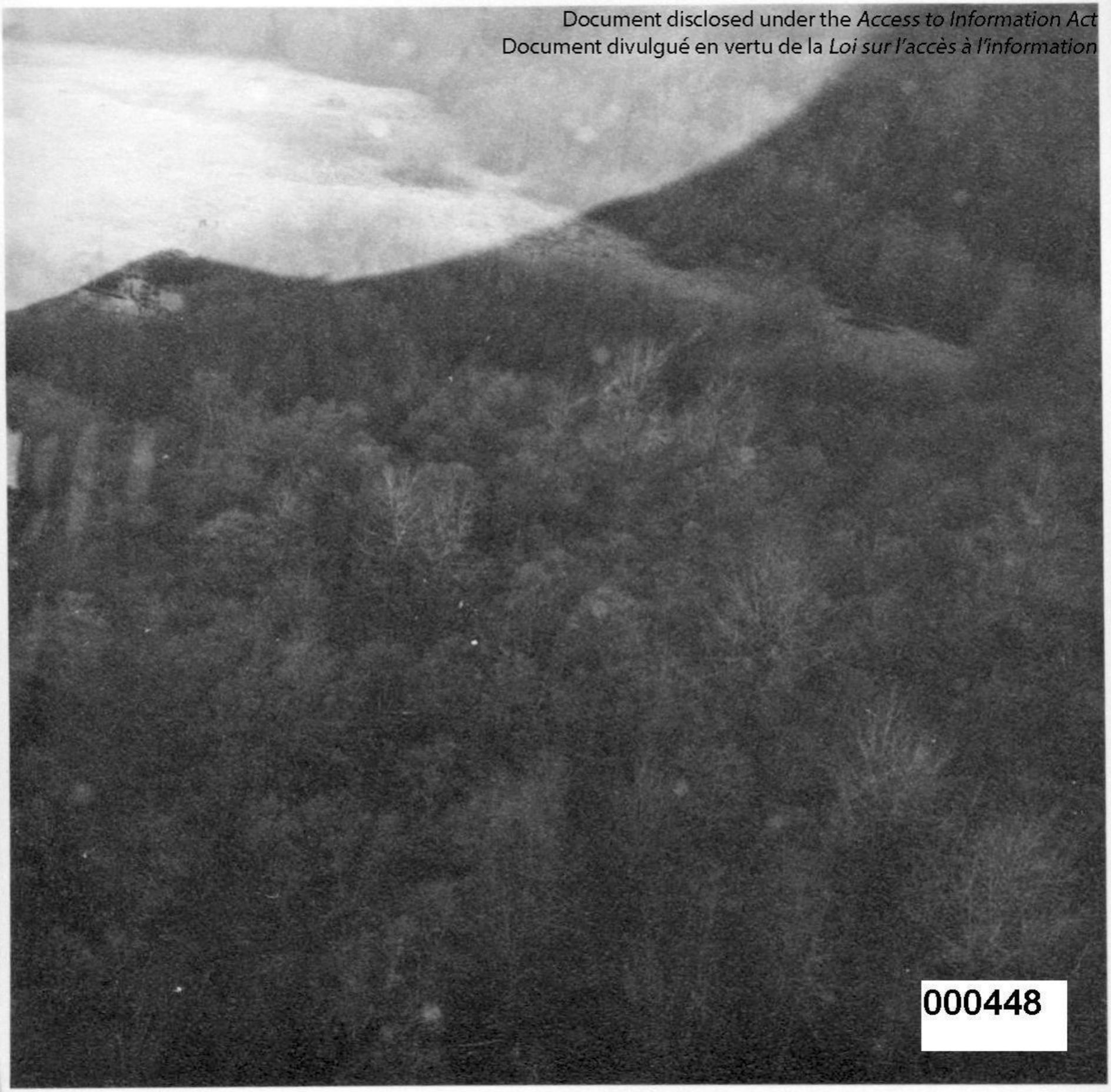
Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000446

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000448

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Agfa 14

Agfa

Agfa

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



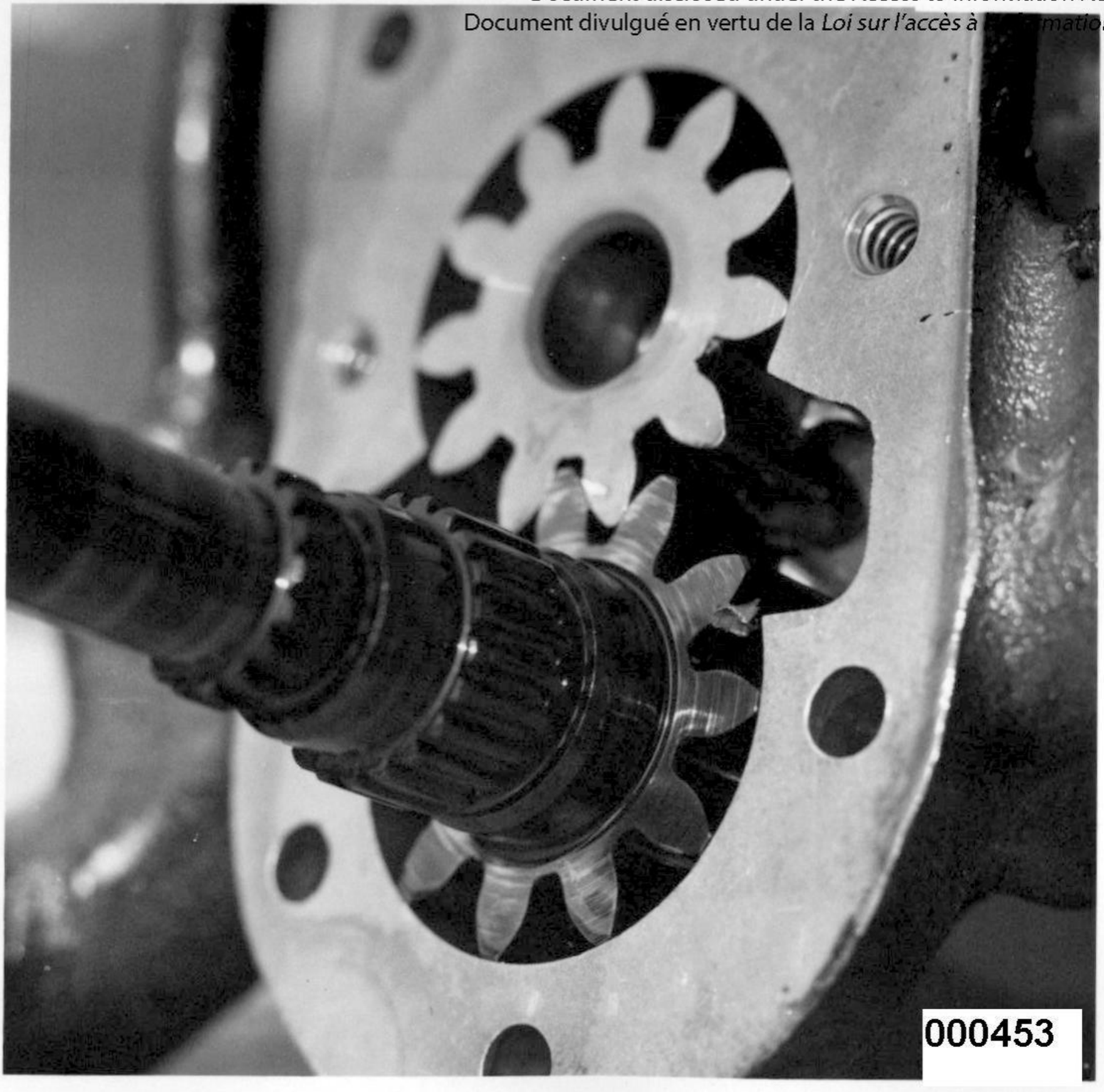
Document disclosed under the *Access to Information Act*
ument divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

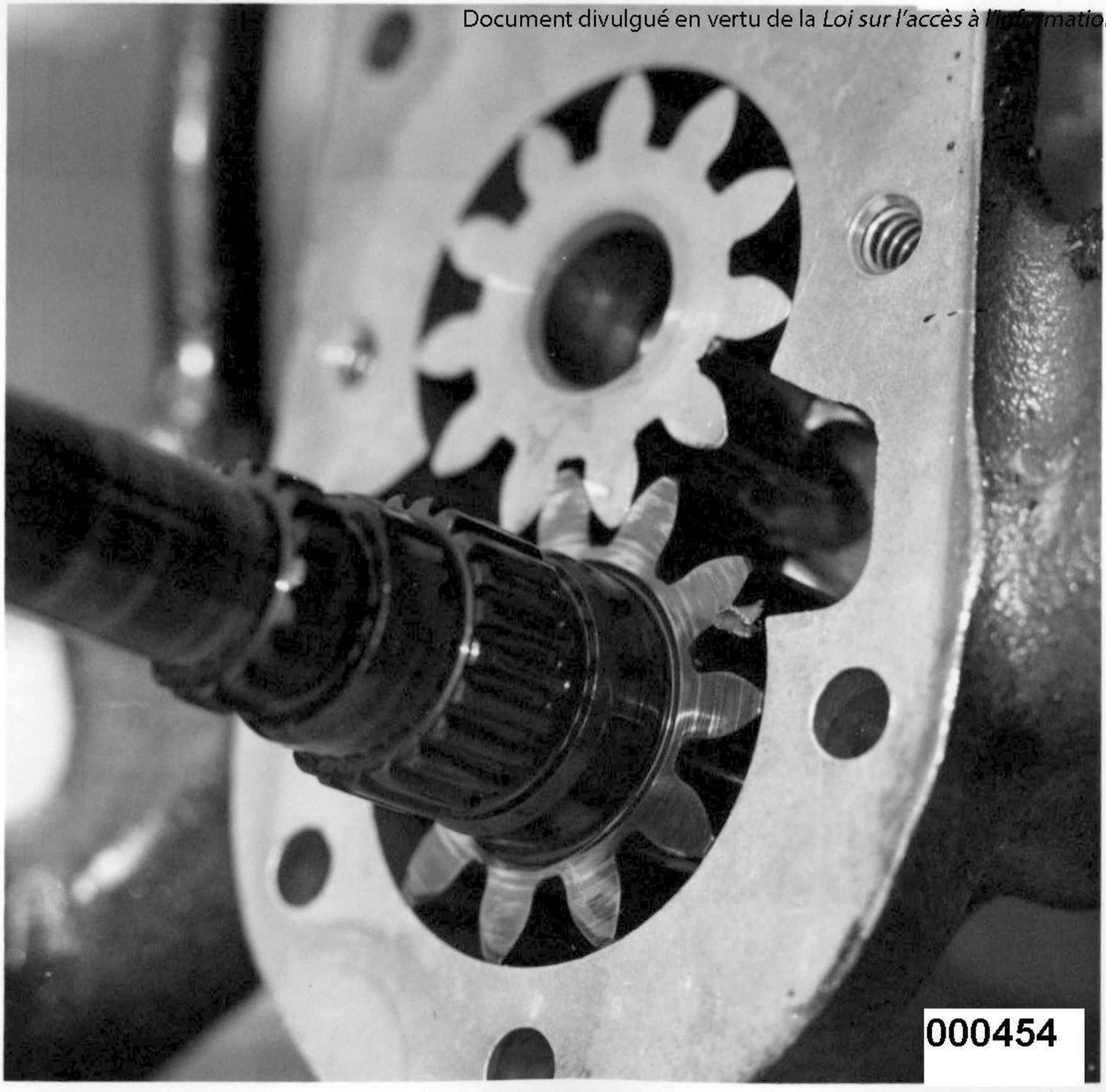


Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



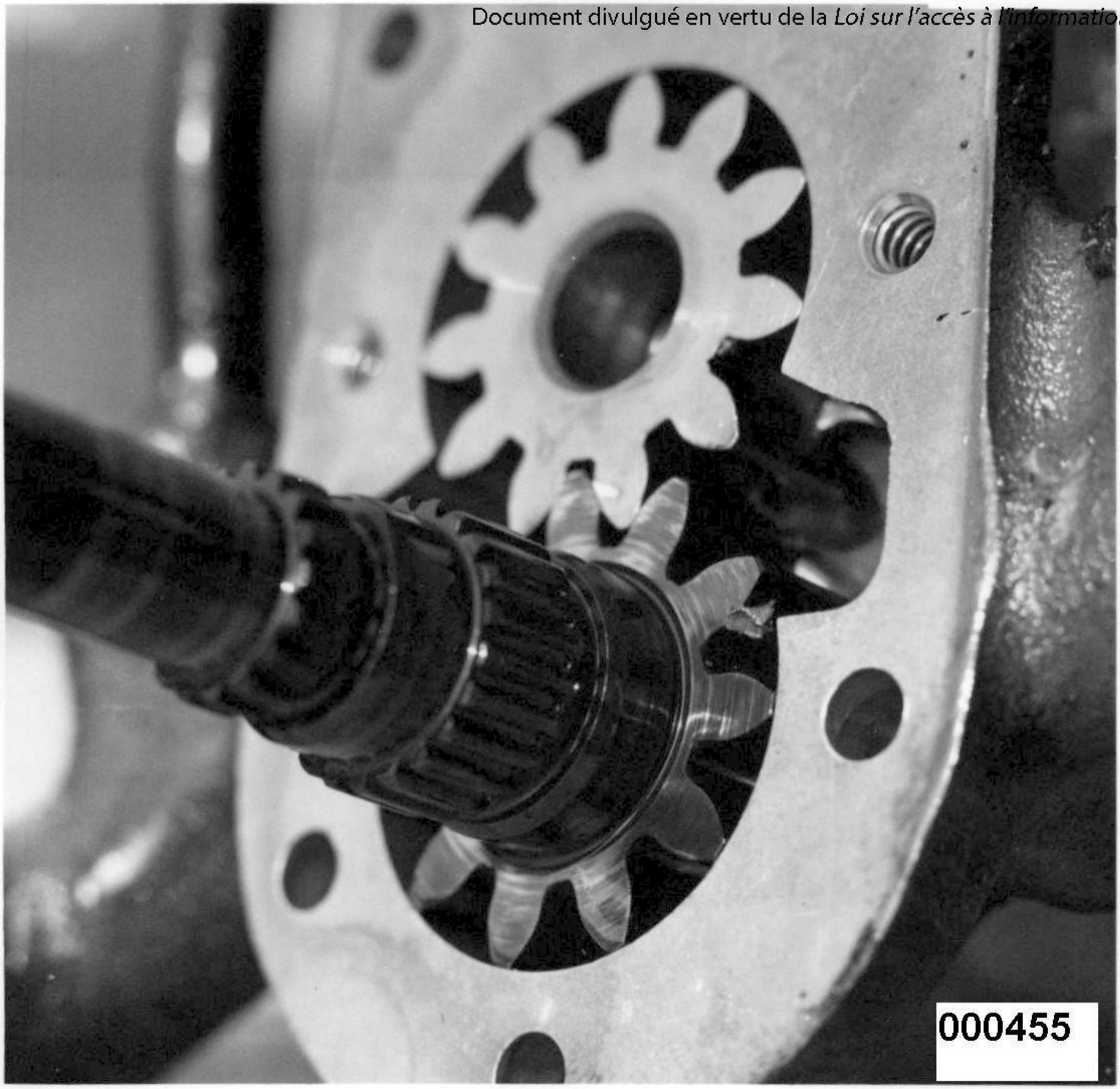
000453

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

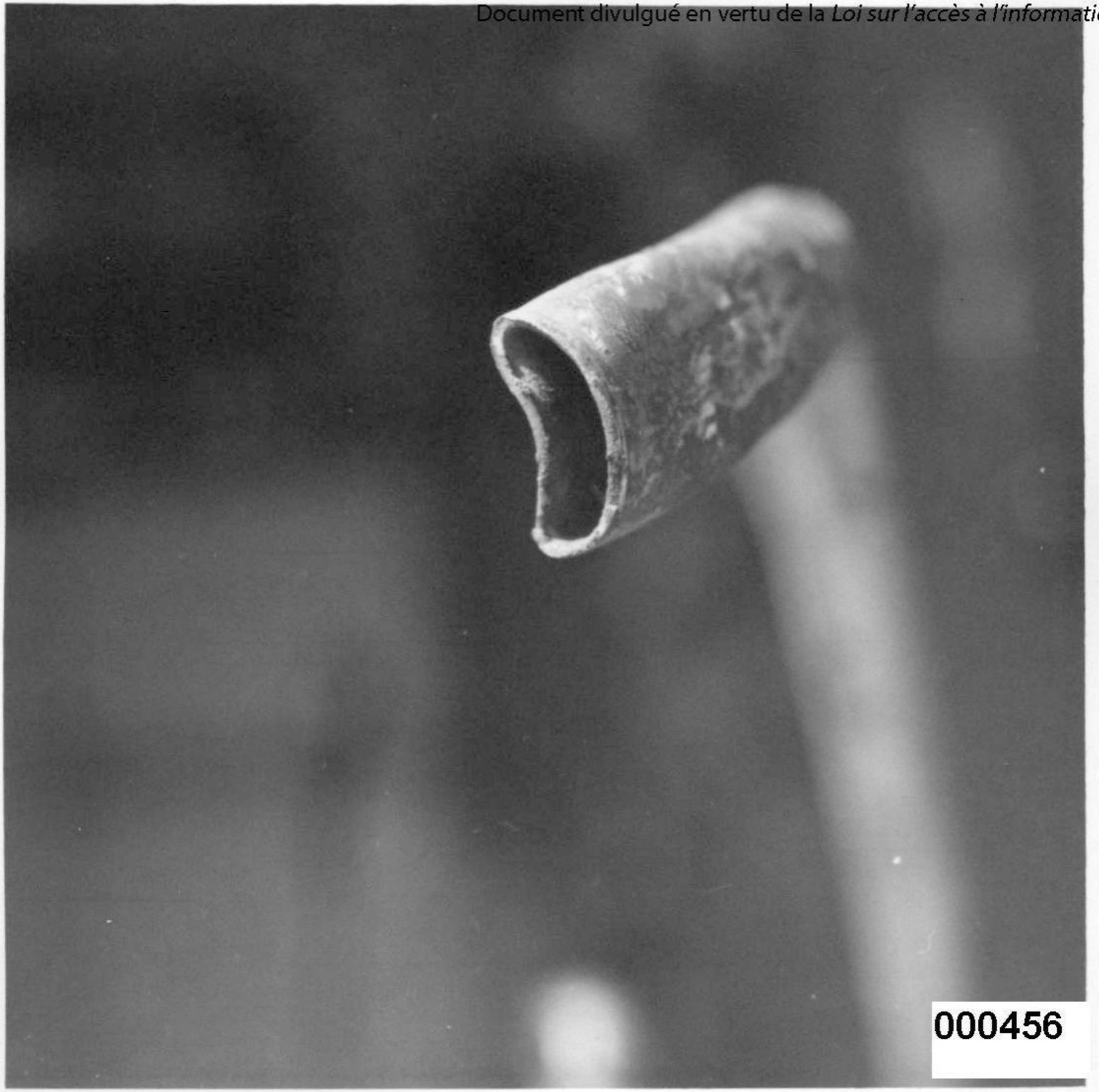


000454

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

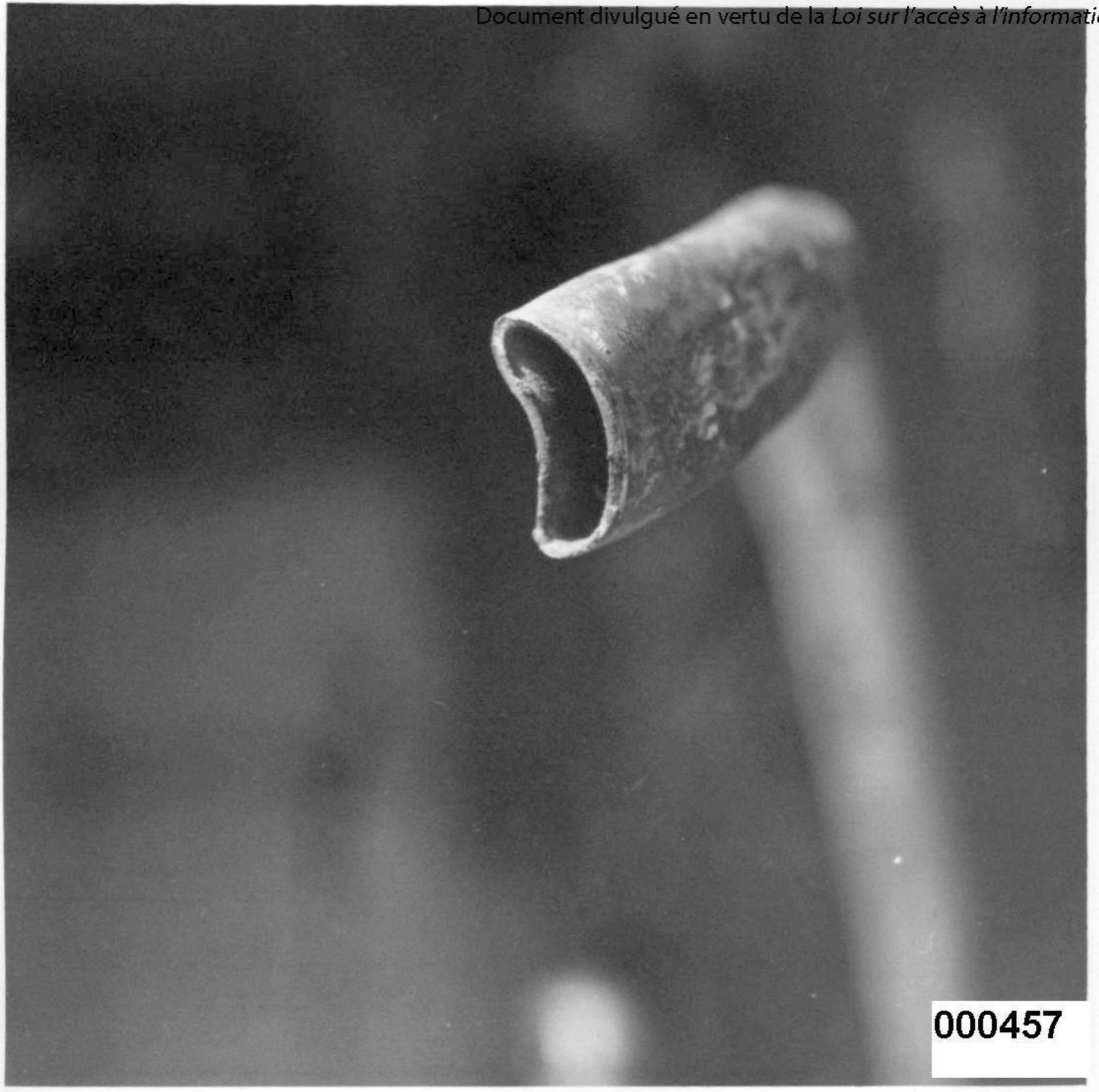


Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



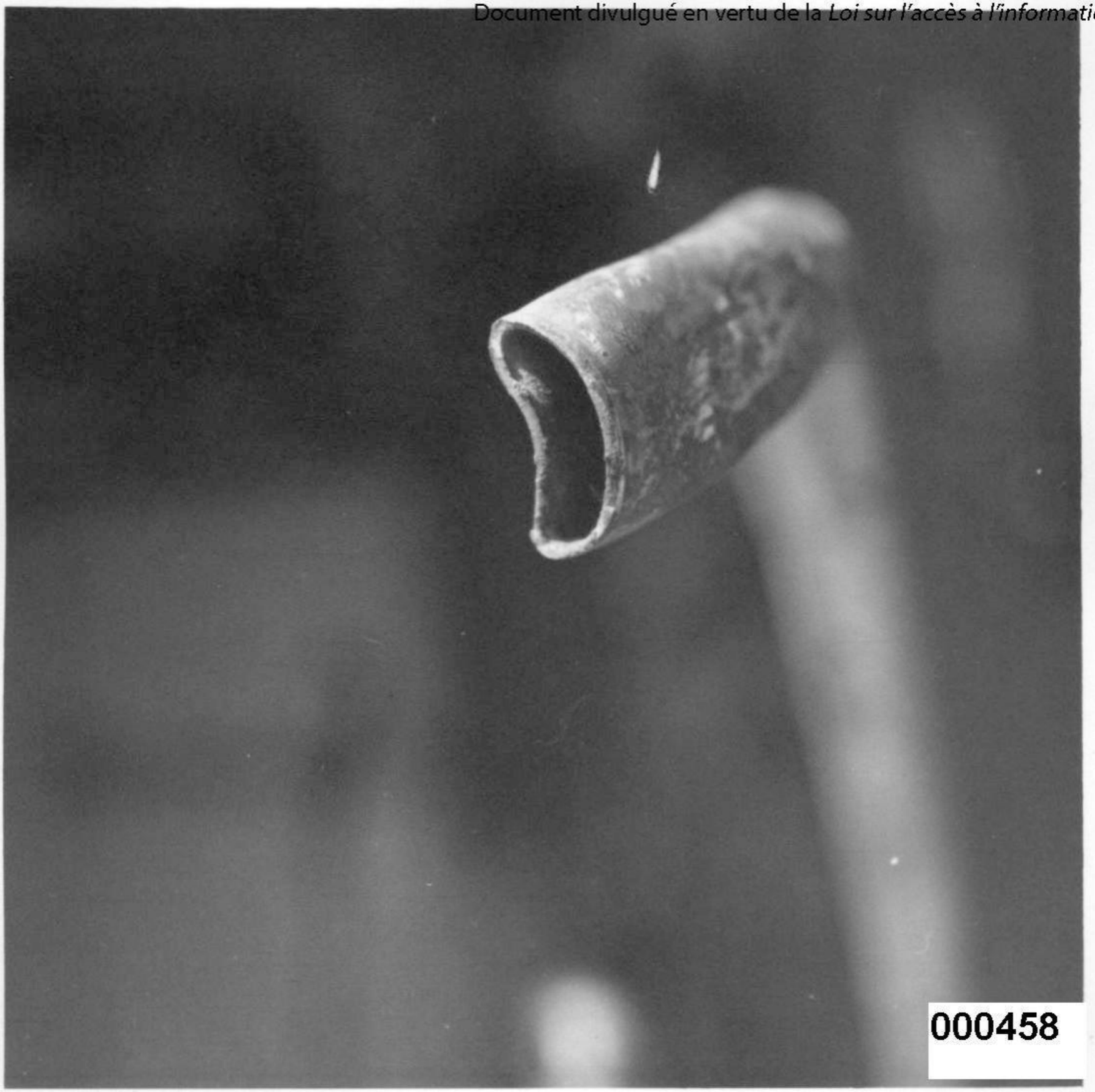
000456

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

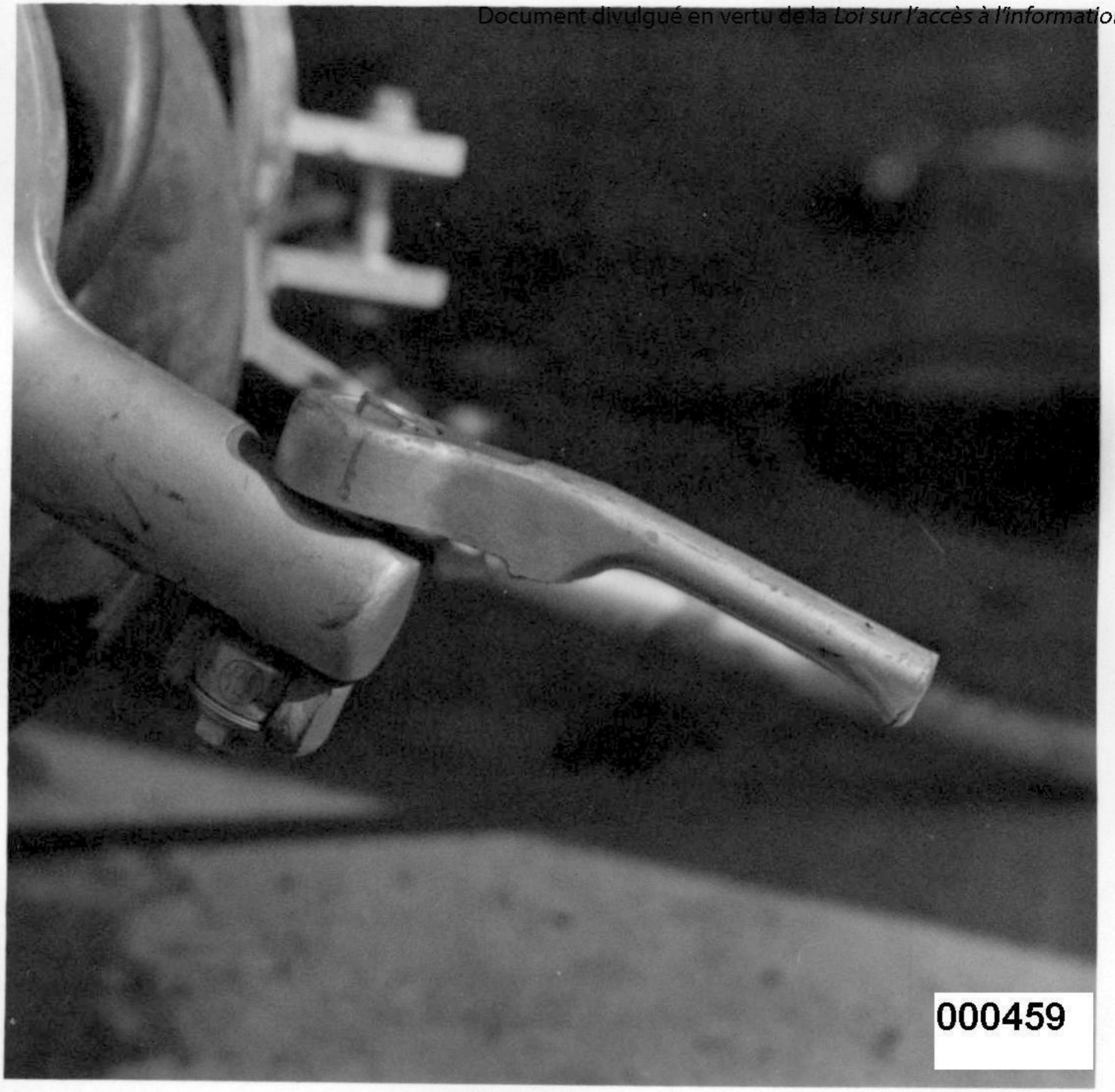


000457

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



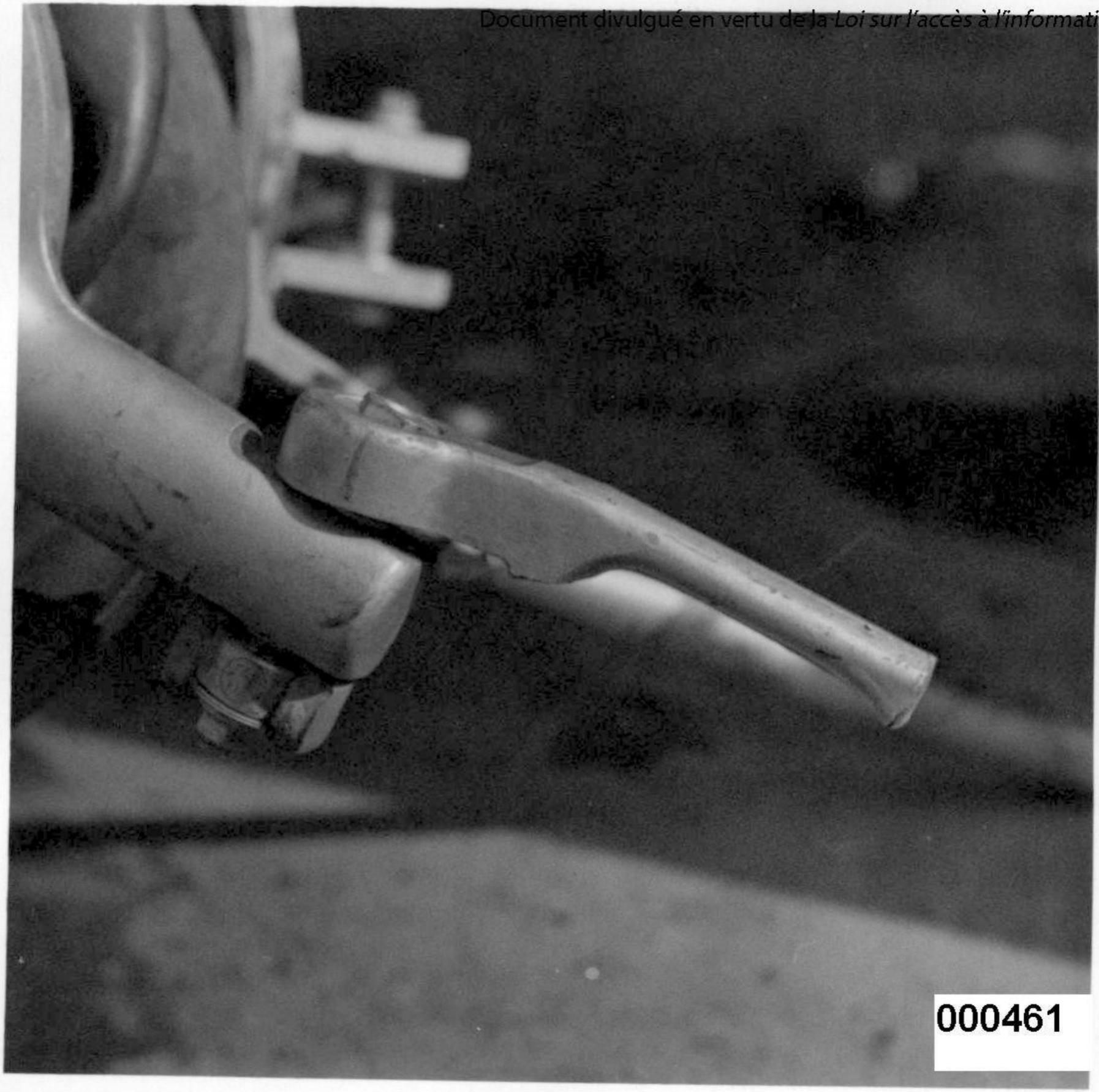
Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000464

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000465

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000467

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000468

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000469

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



000470

From:

INDEX No.:

Agfa Isopan ISS

Agfa Agfacolor Negativfilm UNIVERSAL

Agfa Roll Film

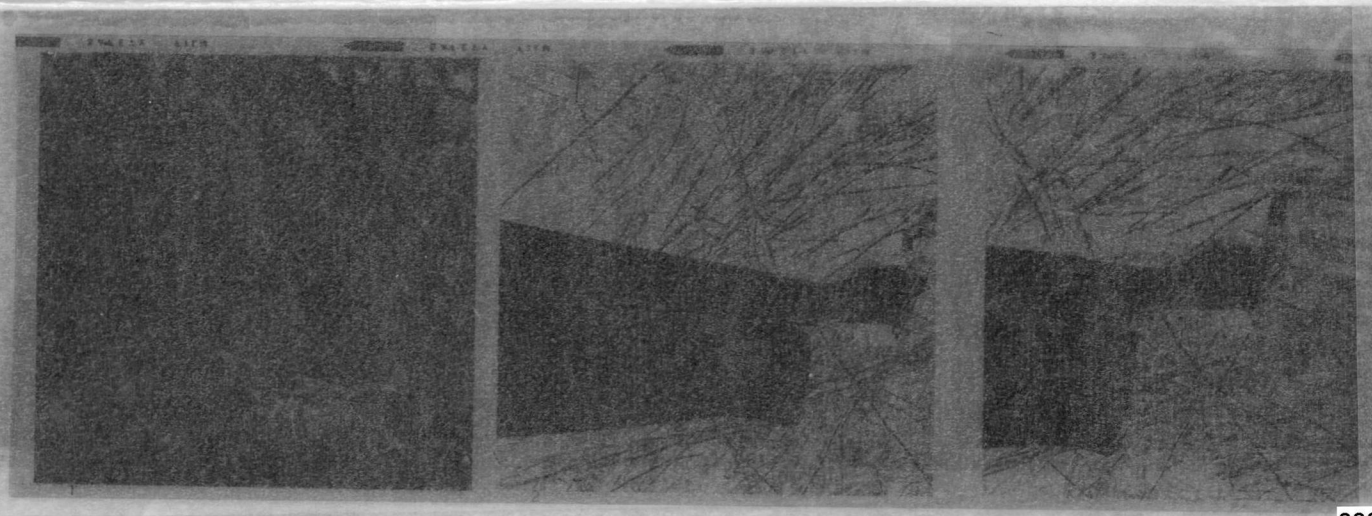
AGFA-GEVAERT

MADE IN GERMANY

000471

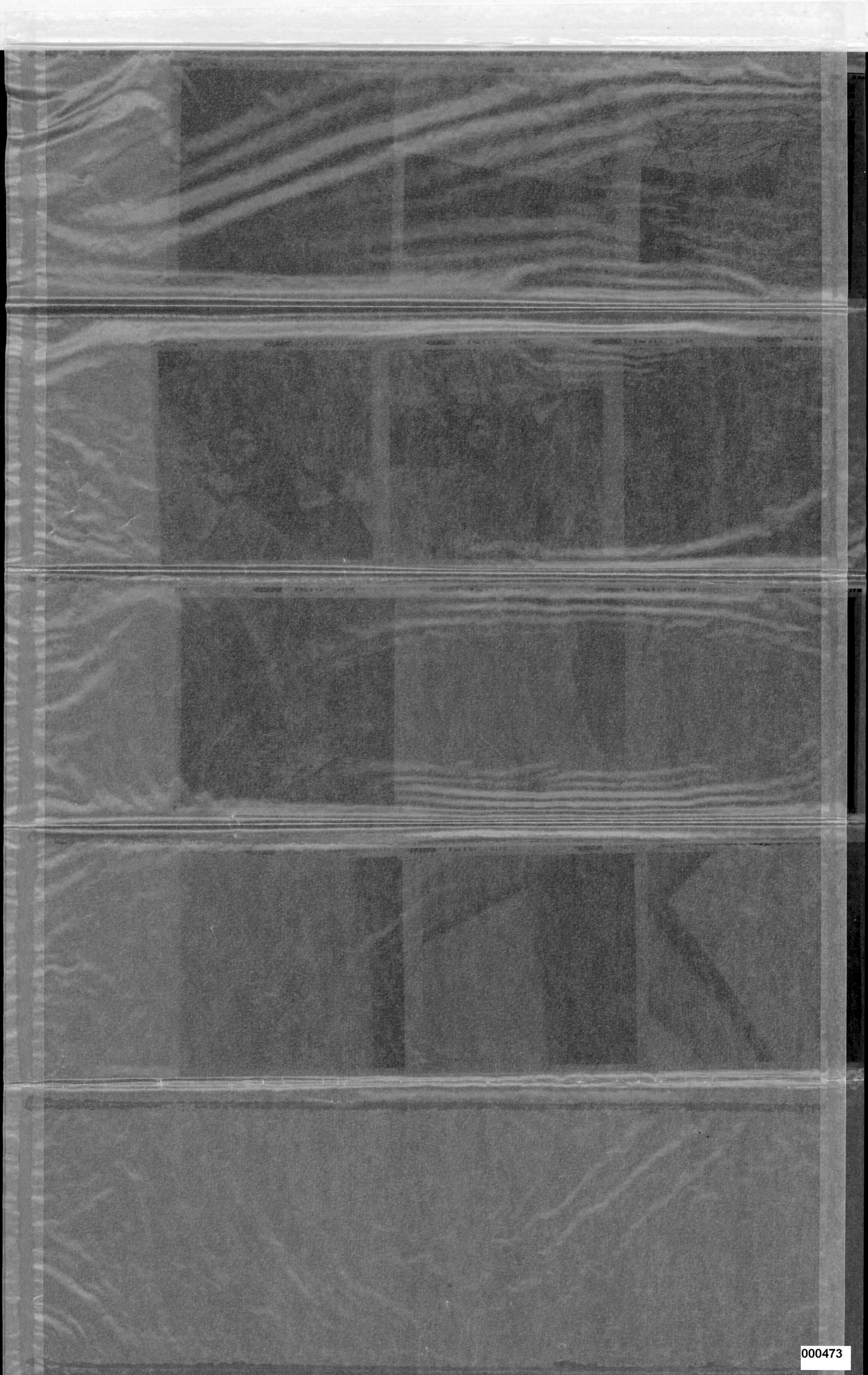
| No. | Frame No. | Subject | No. | Frame No. | Subject |
|---|---|---|---|---|---|
| 1 | | | 13 | | |
| 2 | | | 14 | | |
| 3 | | | 15 | | |
| 4 | | | 16 | | |
| 5 | | | 17 | | |
| 6 | | | 18 | | |
| 7 | | | 19 | | |
| 8 | | | 20 | | |
| 9 | | | 21 | | |
| 10 | | | 22 | | |
| 11 | | | 23 | | |
| 12 | | | 24 | | |

Please - Do not cut Film



000472

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*



From:

INDEX No.:

Agfa Isopan ISS

Agfa Agfacolor Negativfilm UNIVERSAL

Agfa Roll Film

AGFA-GEVAERT

MADE IN GERMANY

000474

| No. | Frame No. | Subject | No. | Frame No. | Subject |
|---|---|---|---|---|---|
| 1 | | | 13 | | |
| 2 | | | 14 | | |
| 3 | | | 15 | | |
| 4 | | | 16 | | |
| 5 | | | 17 | | |
| 6 | | | 18 | | |
| 7 | | | 19 | | |
| 8 | | | 20 | | |
| 9 | | | 21 | | |
| 10 | | | 22 | | |
| 11 | | | 23 | | |
| 12 | | | 24 | | |

Please - Do not cut Film



Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

Document disclosed under the Access to Information Act
Document divulgué en vertu de la Loi sur l'accès à l'information

CA1 5002 - 3795

59164 DEC 29 70

5002 -

DEPARTMENT OF TRANSPORT
ACCIDENT INVESTIGATION

*MINISTÈRE DES TRANSPORTS*
*DIVISION DES ACCIDENTS*

THE ATTACHED REPORT PROVIDES INFORMATION ON AIRCRAFT ACCIDENT(S) IN ACCORDANCE WITH: YOUR REQUEST ☐ OUR POLICY ☐
*LE RAPPORT CI-JOINT CONTIENT DES RENSEIGNEMENTS SUR UN (DES) ACCIDENT(S) D'AVIATION SELON:* *VOTRE DEMANDE* *NOTRE LIGNE DE CONDUITE*

IF NO FURTHER EVIDENCE IS RECEIVED BEFORE 13 January, 1971 THIS REPORT WILL BE PUBLISHED WITHOUT AMENDMENT.
*SI AUCUN AUTRE RENSEIGNEMENT N'EST REÇU AVANT LE* *LE PRÉSENT RAPPORT SERA PUBLIÉ SANS MODIFICATION.*

Regional Superintendent,
Accident Investigation,
Ministry of Transport,
739 West Hastings Street,
Vancouver, B.C.

YOUR REF. _____ *VOTRE RÉF.*
OUR REF. 5002-3796(CAIO) *NOTRE RÉF.*

000477

23-0015

Document disclosed under the Access to Information Act
Document divulgué en vertu de la Loi sur l'accès à l'information

DEPARTMENT OF TRANSPORT
MINISTÈRE DES TRANSPORTS

# AIRCRAFT ACCIDENT REPORT
# RAPPORT D'ACCIDENT D'AVIATION

REFER TO REPORT NO.
REF. RAPPORT N°
3796

| AIRCRAFT TYPE — *Type aéronef* | REGISTRATION — *Immatriculation* | DATE-TIME — *Date-Heure* | OPERATION — *Opération* |
|---|---|---|---|
| Hiller FH-1100 | CF-WMO | 14Mar68 1158 PST | Commercial |
| PLACE — *Endroit* | | LATITUDE | LONGITUDE |
| near Fort Langley, BC | | 49/08N | 122/28W |

LOCALE — *Scène*
Hilly terrain covered with brush and trees at 260 ft asl

WEATHER — *Conditions météorologiques*
Cloud about 2000 overcast, visibility good, wind SSE at 20 gusting to 25 mph; moderate turbulence reported.

| PILOT / PILOTE | LICENCE | TOTAL HOURS — *Heures totales* | | TOTAL HOURS, LAST 90 DAYS — *Total d'heures (90 derniers jours)* | |
|---|---|---|---|---|---|
| | Commercial | 4293 | ALL TYPES — *Tous types* | 150 | ALL TYPES — *Tous types* |
| | | 110 | ON TYPE — *Type en cause* | 52 | ON TYPE — *Type en cause* |

DESCRIPTION OF OCCURRENCE — *Description de l'événement*

While in fast cruising flight at about 500 feet the helicopter partially disintegrated and crashed.

The main rotor mast had failed after being struck twice by the teetering stops. These teetering stop impacts could have been initiated by one or both of these:

- excessive blade flapping due to gust loads
- the pilot attempting to compensate for the turbulence by rapid control movements.

Several contributory conditions were present prior to the accident:

- in high-speed flight and with aft C of G, (calculated) the required forward cyclic would tilt the rotor near to its forward limit bringing the teetering stops close to the mast.
- this helicopter was manufactured with less than the specified teeter angular movement
- with the extended horizontal stabilizer, high-speed forward flight would require an extra increment of forward cyclic and hence rotor disc tilt
- the published operating instructions did not adequately define the safe operating limits.

After the accident operators were advised by the manufacturer's Service Bulletin FH-1100-51-3 to inspect and ensure the proper specified teeter angular dimension, and by Service Bulletin FH-1100-62-1 to remove the stabilizer extensions on FH-1100's not equipped with floats.

| | TOTAL | FATALITIES — *Pertes de vie* | SERIOUS INJURIES — *Blessures graves* | MINOR INJURIES — *Blessures légères* |
|---|---|---|---|---|
| CREW — *Équipage* | 1 | 1 | | |
| PASSENGERS | | | | |
| OTHERS — *Autres* | | | | |

ASSIGNED CAUSE(S) — *Cause(s) assignée(s)*

Inadequate data to safely operate the aircraft

Incorrect manufacture of teetering stops.

Inadequate design of the extended horizontal stabilizer.

000478

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

5002-715(PCA)

739 West Hastings Street,
Vancouver 1, B.C.

June 4, 1970

Mr. Ian Kennedy,
Okanagan Helicopters Ltd.,
Vancouver International Airport,
B.C.

Dear Sir,

This is further to my letters of January 30 and February 19 concerning the report in respect of the accident to your FH-1100, CF-WMO helicopter which occurred on the 14th of March 1968.

When the report was not received I requested additional information from Ottawa on its availability and am now advised that some further complications have arisen in respect of the matter which are presently being investigated. In view of this our headquarters hesitate to predict a probable completion date at this time. They are aware of your interest in obtaining a copy of the report as quickly as possible and have undertaken to keep the delay to a minimum.

Yours truly,

Original Signed by
W. M. JOHNSON

W. M. Johnson,
Regional Controller, Civil Aviation

WMJ:HBG

000479

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

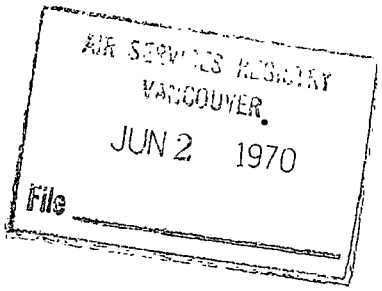
# MEMORANDUM

CA
CAI

CLASSIFICATION

TO
A

P.C.A.
VANCOUVER




27582

YOUR FILE No.
Votre dossier 5002-715 (PCA)

OUR FILE No.
Notre dossier 5002-3796 (CAIO)

FROM
De

C.A.I.
OTTAWA

DATE

26 May, 1970

FOLD

SUBJECT
Sujet

Accident - Hiller FH-1100, CF-WMO
- 14 March, 1968

1. This refers to your memorandum of April 30, 1970, enquiring of the status of the report of the referenced aircraft.

2. I regret the delay in answering, but I was withholding reply because it appeared as if this report was almost ready for release. Unfortunately, further complications have arisen and there will be some further delay. I hesitate to predict a probable date of completion.

3. You may advise the enquirers that we appreciate their desire to have a copy of this report as quickly as possible. We will do our best to keep the delay to a minimum.

H.A. Fawcett,
for Chief, Accident Investigation.

000480

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

C.A.I., OTTAWA

5002-3796

5002-715(PCA)
5008-WMO

P.C.A., VANCOUVER

April 30, 1970

Accident - Hiller FH-1100, CF-WMO
14 March, 1968

1. This is in reference to my letter of January 30, 1970 and your reply of February 12 concerning the availability of the report in respect of the subject accident.

2. The company concerned were advised following your letter that they could anticipate receiving a copy of the report about the end of March. May we be advised if the report is now available?

Original Signed by
W. M. JOHNSON

W. M. Johnson,
Regional Controller, Civil Aviation'

WMJ:HBC

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

OKANAGAN HELICOPTERS LTD.
VANCOUVER AIRPORT, B. C., CANADA
278-5502

February 3, 1970.

04435




Department of Transport,
739 West Hastings Street,
Vancouver 1, B. C.

Attention Mr. W. M. Johnson,
Regional Controller, Civil Aviation

Dear Sirs: Re: Your File 5002-715(PCA)
5008-WMO

Thank you very much for your letter of January 30 enclosing a number of copies of the pilot and owner/operator report of aircraft accident forms.

I am returning herewith a letter from your Mr. R.F. Heiliger addressed to The Village of Fort St. James and a second from Mr. H. A. Stevenson, Regional Construction Engineer for the Construction, Engineering & Archit. Branch, Department of Transport Century Building, 360 Lisgar Street, Ottawa, which I am sure, were included in error, in the envelope addressed to me.

Yours very truly,

Ian Kennedy

Ian Kennedy, dc
President

IK:dc
Encls.

- Mailed
Feb 4/70.

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

5002-715(PCA)
5008-WMO

739 West Hastings Street,
Vancouver 1, B.C.

February 19, 1970

Mr. Ian Kennedy,
Okanagan Helicopters Ltd.,
Vancouver International Airport,
B.C.

Dear Sir,

This is further to my letter of January 30, 1970, concerning the report in respect of the accident to your FH-1100 helicopter CF-WMO which occurred on the 14th of March 1968.

Headquarters now advise that all the information required is now available and that the report is being prepared. While it is difficult to predict a precise date it is anticipated that a copy will be available for you about the end of March.

Yours truly,

Original Signed by-
W. M. JOHNSON

W. M. Johnson,
Regional Controller, Civil Aviation

WMJ:HBG

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

# MEMORANDUM

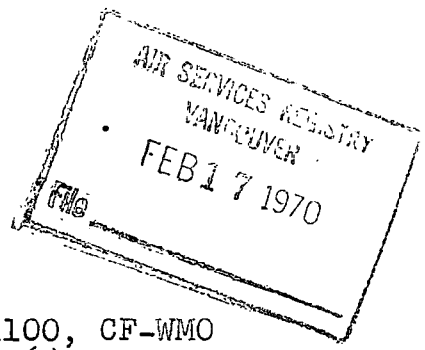
CLASSIFICATION

TO
A

P.C.A.
VANCOUVER

YOUR FILE No. 5002-715
Votre dossier 5008-WMO (PCA)

OUR FILE No. 5002-3796 (CAIO)
Notre dossier




FROM
De

C.A.I.
OTTAWA

DATE
12 February, 1970.

FOLD

SUBJECT
Sujet

Accident - Hiller FH-1100, CF-WMO
- 14 March, 1968

06627

1. Reference your memorandum of January 30, 1970, concerning the status of the report of the subject accident.

2. It appears that all the information required is now available and the report is being prepared. I hesitate to predict a precise date, but we will likely provide a copy to Mr. Kennedy by the end of March.

H.A. Fawcett,
for Chief, Accident Investigation.

000484

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

5002-715(PCA)
5008-WMO

739 West Hastings Street,
Vancouver 1, B.C.

January 30, 1970

Mr. Ian Kennedy,
Okanagan Helicopters Ltd.,
Vancouver International Airport, B.C.

Dear Sir,

In accordance with our telephone conversation this date enclosed are a number of copies of the pilot and owner/operator report of aircraft accident form. Additionally you may be interested in the green enclosure providing for a different presentation of personal data in respect of pilots.

I have written Ottawa in respect of the accident to FH 1100 CF-WMO which occurred on the 11th of March 1968. They have been requested to provide information on when they anticipate the accident report will be available.

Yours truly,

Original Signed by
W. M. JOHNSON

W. M. Johnson
Regional Controller, Civil Aviation

WMJ:HBG
Enc.

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

CAI, OTTAWA

5002-715(PCA)
5008-WMO

PCA, VANCOUVER

January 30,1970

Accident Hiller FH 1100 CF-WMO - March 14, 1968

1. Mr. Ian Kennedy of Okanagan Helicopters has been in touch with this office in respect of the subject accident.

2. They have a number of outstanding matters arising from this accident and are most interested in learning when the accident report will be available. It would be appreciated if you could advise the anticipated date when the report will be completed.

Original signed by
W. M. JOHNSON

W. M. Johnson,
Regional Controller, Civil Aviation

WMJ:HBC

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

# MEMORANDUM

CLASSIFICATION

TO / A: P.C.A.I. Vancouver

YOUR FILE No. / Votre dossier: 5002-715(PCAI)

AIR SERVICES REGISTRY
VANCOUVER
JAN 21 1970
File

OUR FILE No. / Notre dossier: 5002-3796(CAIE)

FROM / De: C.A.I.E. Ottawa

DATE: January 19, 1970.

FOLD

SUBJECT / Sujet: Accident - Hiller FH-1100, CF-WMO
Engineering Laboratory Report No. 24/68

02559

1. Enclosed please find a copy of Appendix V to Report 24/68, and an amended Index Page to replace the existing one.

2. Please acknowledge receipt on the attached sheet.

for A.N. le Cheminant
C.A.I.E.

Attach.

Report amended
Jan 21/70



000487

Document disclosed under the *Access to Information Act*
Document divulgué en vertu de la *Loi sur l'accès à l'information*

DEPARTMENT OF TRANSPORT

# MESSAGE FORM

FILE NO. 5002-715

DATE January 5, 1970 19

COMPLETE THIS SECTION FOR COMMERCIAL MESSAGES ONLY | CHARGE

C A I E, OTTAWA

PCAI 179 REYRTEL CAIE 57 CONCERNING CF-WMO LABORATORY REPORT 24/68. ONE COPY RECEIVED ( NO.2 ) OCTOBER 28TH 1968. ACKNOWLEDGED RECEIPT OCTOBER 29TH 1968.

J. M. Young
for P C A I VANCOUVER

TY/mim

O

38-0014
9-63

FILE COPY

000488