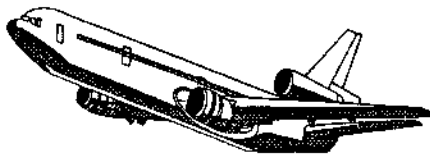


21st MEETING OF THE BSCE
(JERUSALEM 23-28 March 1992)

WP 2A

PICA

Programme
d'Information
sur les Collisions
Aviaires



DGAC

STNA/2N

A. EUDOT

P I C A

STNA/2N

PICA allows to manage birdstrikes
database at a national level



Quick and easy to use,
PICA prints forms, tables and graphs.

P I C A

Paramètres Années Gestion Trié Edition Tableaux Graphes Fin

Collisions
Orceaux
Moteurs
Compagnies
Terrains
Avions

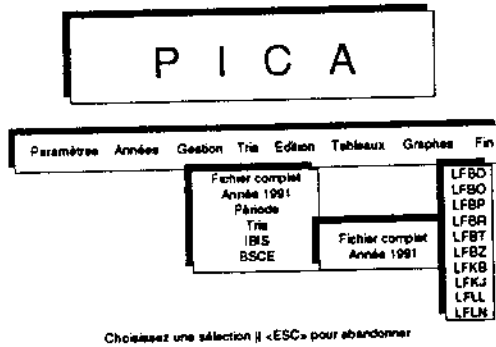
Saisie
Modification
Consultation

Création de nouvelles fiches

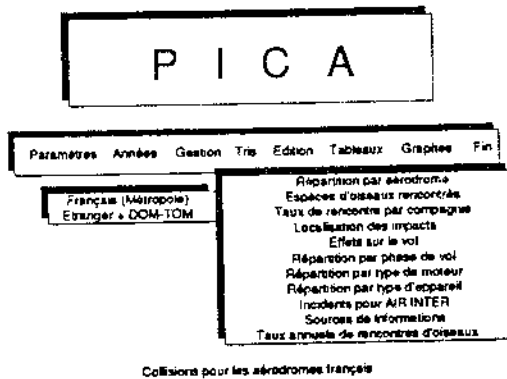
The choice of operations is done by scrolling menus.
Help messages on the bottom of the screen
guides the user.



For instance, for printing birdstrikes file according to TOULOUSE-BLAGNAC, there are different menus will appear on screen.



And for printing table concerning the birdstrikes number for domestic airfields in 1991, consecutive menus will appear:



PICA: a bird strike information program
(Presented by A. EUDOT)

SUMMARY

The PICA version presented is a compiled version which can thus be used on any IBM-PC compatible micro-computer without using any software program other than the PICA. Data base management, consultation, exploitation (list editing, sortings, table and graph editing...), are now easier through a more sophisticated ergonomics than that of the former version (scrolling menus, help messages, execution speed...).

The version presented here is the french version of the PICA program, although an appropriate translation of the texts would enable it to be adapted to the requirements of any user.

When you want to use PICA, at first, you have to choose the year on which you want to work. (For instance: 1990). The main menu appears, which proposes you different choices of actions. Those different choices are:

PARAMETERS: especially for choosing output devices. You can print data on printer directly or record data in a special file.

YEAR : if you want to change the working year.

MANAGEMENT: proposes the management of different databases.

SORTS : for selecting different criteria of sorts and create sorts files.

OUTPUT : proposes different data output in the form of lists (or tables for BSCE output).

TABLES : printing out different tables.

GRAPHS : printing out graphs for a specific airfield or for all data.

HELICOPTER: it's a special procedure for taking out data on birdstrikes with helicopters. This procedure was developed in order to propose a certification standard for helicopters.

MANAGE

You ca

BIRDST

BIRDS

ENGINE

AIRLIN

AIRFIE

AIRCRA

For ea

DATA E

It's a

for in

you ha

right

birdst

inputi

Air Fr

findin

press

want,

you do

the rig

When t

you hav

SORT

At first

for :

op

is

AF

AN

ai

is

EA

en

Then yo

OUTPUT

You can

- all

- a f

MANAGEMENT OF DIFFERENT DATABASES

You can manage:

BIRDSTRIKES DATABASE

BIRDS DATABASE

ENGINES DATABASE

AIRLINES OPERATORS DATABASE

AIRFIELDS DATABASE

AIRCRAFT DATABASE

For each one, you can enter, modify or consult data.

DATA ENTRY AND MODIFICATION

It's about the same procedure for entering or modifying data: for instance, if you want to modify a birdsrike data, first you have to choose the criterion that will allow to find the right record to modify. (e.g. modify an Air France aircraft birdsrike, you select with F2 key "operator" and you're inputing "1991AF"). You are now on the first record concerning Air France operator in 1991. With Page Down key, you're finding the record you want to modify. When you have found it, press <ENTER> and you can modify the field names that you want, (e.g. modify field name concerning "bird species" and if you don't know the code of this bird, press F5 key and choose the right bird, e.g. PLUV.DOR: golden plover). When the modification is done, press <ESC> and <ESC> again if you have no more record to modify.

SORT

At first, you're creating the sorting:

for instance:
operator
is equal to
AF (Air France)
AND
aircraft
is equal to
EA30 (Airbus A300)
end of combinations.

Then you give a name to the sort file (e.g. EA30_AF)

OUTPUT

You can print:

- all the birdstrikes file
- a file for working year

- output for a given period
- sorting output for all the file or for working year. Then you choose the sort file in the list proposed (appendix 1).
- IBIS output: this is the IBIS code transcription of the birdstrike form for the working year
- BSCE output: at first, the computer is calculating the number of records which concerns BSCE data (according to the weight of aircraft, french operators only and so on). Then, the different tables supplied yearly to the BSCE Statistics working group, can be printed directly (e.g. parts struck, appendix 2).

TABLES OUTPUT

Different tables can be printed. (e.g. bird species distribution for working year. At first, computer is counting the number of records for which the bird species is known and then counts the number of cases (total and serious) and the rate by species. Appendix 3).

GRAPHS OUTPUT

You can choose to plot general graphs or graphs concerning a given airfield. If you choose graphs concerning an airfield, you have to choose this airfield in the list. (e.g. Bordeaux-Mérignac). Different graphs can be printed (e.g. month distribution. Computer is calculating the number of strikes and the number of serious strikes for each month of the working year, appendix 4). The graph is presented on the screen. Then the computer suggests an output on the plotter.

HELICOPTERS

It's a special procedure developed for giving statistical data on birdstrikes with different types of helicopters, in order to propose standard for helicopters of certification. (e.g. distribution of birdstrikes according to bird weights, appendix 5.)

If anybody is interested by additional information, I'm ready to show you demonstrations on my portable micro-computer.

For more information on PICA, using and acquisition, you can contact M. A. EUDOT:
 STNA/2N 246, Rue LECOURBE
 75732 PARIS CEDEX 15 FRANCE
 TEL: 33 (1) 40 43 47 33
 FAX: 33 (1) 40 43 47 92

PARIS STRA/2N . DATE D'EDITION : 18/03/92

FICHIER COMPLET : 5601 FICHES

SELECTION : EASO_AF POUR L'ANNEE 1990

DATE	HEURE	LIEU	PASSE	AVION	MOTEUR	JOUR	VIT-Kt	MTO	CIE	HAUT-ft	VOL	OISEAU	TAILLE	VUS	TOUCHEES	PARTIES TOUCHEES ET DECATS OBSERVEES	INMAT	INFORMATION	EFFET	OBSERVATIONS	ENFORCEMENT	
19/02/90				EASO																		
19.07	28			CF6 5002R																		

PREMIER COMPLET : 8403 PICHES
 RELEVATION : EA30 AF POUR L'ANNÉE 1990

DATE	HEURE	LIEU	PISTE	MOTEUR	JOUR	VIT-KM	HTO	VOL	DISEAU	VUS	TOUTES	PARTIES TOUCHÉES ET DÉGÂTS OBSERVÉS	INMAT	INFORMATION	EFFET	OBSERVATIONS
									TAILLE	TOUCHES			COUTIF)	PIL. AVEFTI		
19/02/90	19.07	LFPG	EA30	CF6.50C2R	AF	70	150	APP	MOYEN	1		FUSE L	FVGL	PIL NON	AUCUN SELAGE. 8	AUCUN ENFORCEMENT FU
21/03/90	16.03	LFPG	EA30	CF6.50C2R	AF	0	175	DEC	MOYEN	2 & 10 2 & 10		MOT1 G	TUZO	PIL NON	ATTPRUD 250000	ATTPRUD 4 AUBES HS. VID CARBURANT. RETARD. 7430
05/05/90	04.20	LFKJ	EA30	CF6.50C2R	AF	0	120	DEC	MOUET. RI MOYEN	2 & 10 2 & 10		MOT1 G	FVGS	TER NON	DEC. INT GTR CHANCE. 8	
10/05/90	16.30	LFPG	EA30	CF6.50C2R	AF	130G	160	DES	PETIT	2 & 10	1	RADO N	FVGA	PIL NON	AUCUN	8
27/06/90	20.25	LPMN	EA30	CF6.50C2R	AF	7	7	ATT	GOEL. ARG GRAND		1	MOT2 N	FVGS	DM NON	AUCUN	8
13/07/90		LFPG	EA30	CF6.50C2R	AF	200	140	DES	HIR/MART PETIT		1	PAIE N	FVGH	PIL NON	AUCUN	8
17/07/90	13.50	LFPG	EA30	CF6.50C2R	AF	0	7	DEC	MOUET. RI MOYEN	11 & 100	1		FVGL	TER OUI	AUCUN	8
27/07/90	07.58	LFPG	EA30	CF6.50C2R	AF	300	130	DES	PETIT	2 & 10 2 & 10		RADO N PAIE N MOT2 N	FVGC	PIL NON	AUCUN	8
28/07/90		LFPG	EA30	CF6.50C2R	AF	7	7	ATT	PIGEON. C MOYEN		1	MOT1 N	FVGR	DM NON	AUCUN	8
13/08/90	15.58	UTBA	EA30	CF6.50C2R	AF	0	120	DEC	GOEL. ARG GRAND	11 & 100 2 & 10		MOT2 N ALLE N TRAI N	FVGO	DM+PIL NON	AUCUN	8
30/08/90		LFPG	EA30	CF6.50C2R	AF	7	7	ATT	PEDRI. CR MOYEN		1		FVGS	DM NON	AUCUN	8

PARTIES TOUCHÉES POUR L'ANNEE 1990

PARTIE	FUSE- LAGE	NEZ	RADO- ME	PARE- BRISE	MOTEUR	AILE ROTOR	TRAIN	EMPEN- NAGE	INCON- NU	TOTAL	% BASE SUR 419 CAS
INCONNU	5	22	23	21	87	17	6	1	7	189	45.1
CATEGORIE A	1	5	8	12	21	5	5	1	2	60	14.3
CATEGORIE B	16	20	13	17	103	31	25	3	37	265	63.2
CATEGORIE C										0	0.0
CATEGORIE D										0	0.0
TOTAL	22	47	44	50	211	53	36	5	46	514	
% BASE SUR 419 CAS	5.3	11.2	10.5	11.9	50.4	12.6	8.6	1.2	11.0		

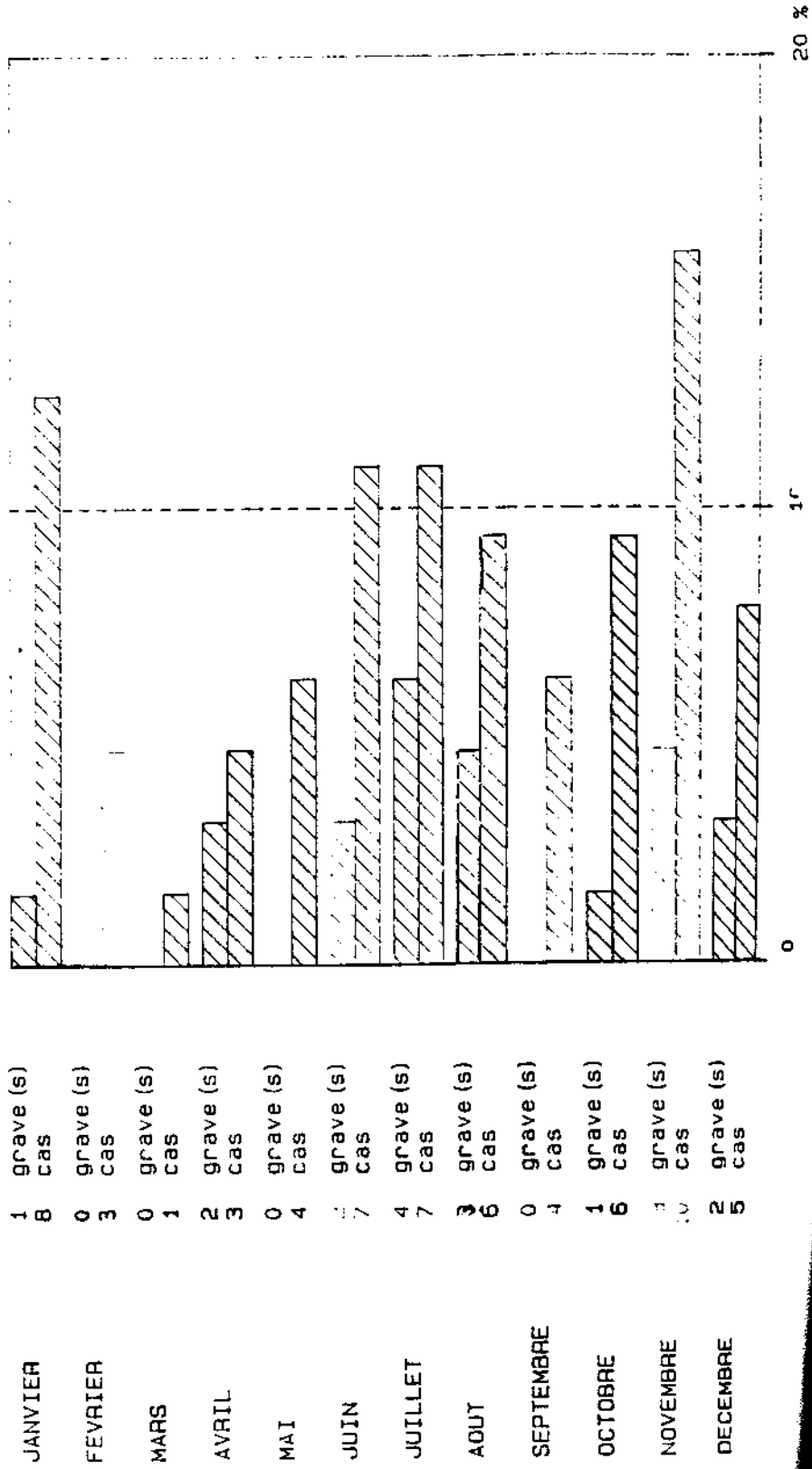
NOM
ALOUETTE DES
BECASSE DES
BRUANT PROVER
BUSARD DES RO
BUSARD SAINT-
BUSE OU MILAN
BUSE VARIABLE
CHEVALIER COM
CHOUCAS DES T
CHOUETTE CHEV
CHOUETTE EFFR
CORBEAU FREUX
CORNEILLE NOIR
COUCOU GRIS
EPERVIER D'EUR
ETOURNEAU SANS
FAUCON CRECER
GOELAND ARGENT
GOELAND BRUN
GRAND CORMORAN
GRIVE DRAINE
GRIVE MUSICIENN
GUEPIER D'EUROP
HERON BIREAU
HERON CENDRE
HIBOU BRACHYOTE
HIBOU MOYEN-DUC
HIRONDELLE DES C
HIRONDELLE DES F
HIRONDELLES OU M
INCONNUS
LARIDE
MARTINET NOIR
MILAN NOIR
MILAN ROYAL
MOINEAU DOMESTIQ
MOUETTE BIEUSE
MOUETTE TRIDACTYL
MOUETTES OU GOELA
ODICNEME CRIARD
PASSEREAUX
PERDRIX GRISE
PERDRIX ROUGE
PIGEON DOMESTIQUE
PIGEON RAMIER
PIGEON SP.
PIPIT FARLOUSE
SAPACEN DIURNES
STRIGIDE
TOURTERELLE DES BO
TROQUET PATRE
VANNEAU HUPPE

Appendix 3

ESPECE D'OISEAUX RENCONTRES EN 1991

ESPECE D'OISEAUX		POIDS (g)	NOMBRE DE CAS		% BASE SUR 462 CAS
NOM COMMUN	NOM LATIN		TOTAL	AV. DOMMAGE	
ALOUETTE DES CHAMPS	ALAUDA ARVENSIS	38	1		0.2
BECASSE DES BOIS	SCOLOPAX RUSTICOLA	300	2	1	0.4
BRAVANT PROYER	EMBERIZA CALANDRA	48	2	1	0.4
BUSARD DES ROSEAUX	CIRCUS AERUGINOSUS	630	2		0.4
BUSARD SAINT-MARTIN	CIRCUS CYANEUS	430	5	1	1.1
BUSE OU MILAN		900	4	2	0.9
BUSE VARIABLE	BUTEO BUTEO	800	21	3	4.5
CHEVALIER COMBATTANT	PHILOMACHUS PUCHAZ	140	1		0.2
CHOUCAS DES TOURS	CORVUS MONEDULA	234	1	1	0.2
CHOUETTE CHEVECHE	ATHENA NOCTUA	164	2		0.4
CHOUETTE EFFRAIE	TYTO ALBA	315	7		1.5
CORBEAU FREUX	CORVUS FRUGILEGUS	430	13	1	2.8
CORNEILLE NOIRE	CORVUS CORONE	530	5		1.1
COUCOU GRIS	CUCULUS CANORUS	106	1		0.2
EPERVIER D'EUROPE	ACCIPITER NISUS	190	1		0.2
ETOURNEAU SANSONNET	STURNUS VULGARIS	80	4		0.9
FAUCON CRECHERELLE	FALCO TINNUNCULUS	205	66	2	14.3
GOELAND ARGENTE	LARUS ARGENTATUS	1100	28	4	6.1
GOELAND BRUN	LARUS FUSCUS	820	2	1	0.4
GRAND CORMORAN	PHALACROCORAX CARBO	2430	1		0.2
GRIVE DRAINE	TURDUS VISCIVORUS	125	1		0.2
GRIVE MUSICIENNE	TURDUS PHILOMELUS	74	3		0.6
GUEPIER D'EUROPE	MEROPS APIASTER	51	1		0.2
HERON BIHOREAU	NYCTICORAX NYCTICORAX	670	1		0.2
HERON CENDRE	ARDEA CINEREA	1500	3	1	0.6
HIBOU BRACHYOTE	ASIO FLAMMEUS	355	4		0.9
HIBOU MOYEN-DUC	ASIO OTUS	275	5		1.1
HIRONDELLE DES CHEMINEES	HIRUNDO RUSTICA	18	6		1.3
HIRONDELLE DES FENETRES	DELICHON URBICA	17	1		0.2
HIRONDELLES OU MARTINETS	HIRUNDINIDAE OU APOIDIDAE	30	22		4.8
INCONNUS			165	14	
LARIDE	LARIDAE		1		0.2
MARTINET NOIR	APUS APUS	40	29	1	6.3
MILAN NOIR	MILVUS MIGRANS	780	22	1	4.8
MILAN ROYAL	MILVUS MILVUS	1020	2	2	0.4
MOINEAU DOMESTIQUE	PASSER DOMESTICUS	28	1		0.2
MOUETTE RIEUSE	LARUS RIDIBUNDUS	275	68	5	14.7
MOUETTE TRIDACTYLE	RISSA TRIDACTYLA	390	1		0.2
MOUETTES OU GOELANDS	LARIDAE		2		0.4
ODONICHENE CRIARD	BURHINUS OEDICNEMUS	450	2	1	0.4
PASSEREAUX	PASSERIFORMES	20	2		0.4
PERDRIX GRISE	PERDIX PERDIX	400	8	2	1.7
PERDRIX ROUGE	ALECTORIS RUFA	450	1		0.2
PIGEON DOMESTIQUE	COLUMBA LIVIA	395	5		1.1
PIGEON AMIER	COLUMBA PALUMBUS	465	19	6	4.1
PIGEON SP.	COLUMBIDAE	400	3	2	0.6
PIPIT FARLOUX	ANTHUS PRATENSIS	18	2		0.4
RAPACES DIURNES	ACCIPITRIDAE		9	1	1.9
STRIGIDE	STRIGIDAE	270	2		0.4
TOUATERELLE DES BOIS	STREPTOPELIA TURTUR	145	1		0.2
TRAQUET PATRE	SAXICOLA TORQUATA	14	1		0.2
VANNEAU KUPPE	VANELLUS VANELLUS	215	65	6	14.1

REPARTITION PAR MOIS POUR L'ANNEE 1989 A PARIS-ORLY



Appendix 5

Collisions oiseaux-hélicoptères

Bird Weight (in pounds)	Number of strikes		Percentage	
	Total	Damaged	Total	Damaged
W < 1/4	68	22	33.8 %	10.9 %
W < 1/2	87	24	43.3 %	11.9 %
W < 1	138	36	68.7 %	17.9 %
W < 2	169	50	84.1 %	24.9 %
W < 4	190	57	94.5 %	28.4 %
W < 8	198	62	98.5 %	30.8 %
TOTAL	201	64	100.0 %	31.8 %