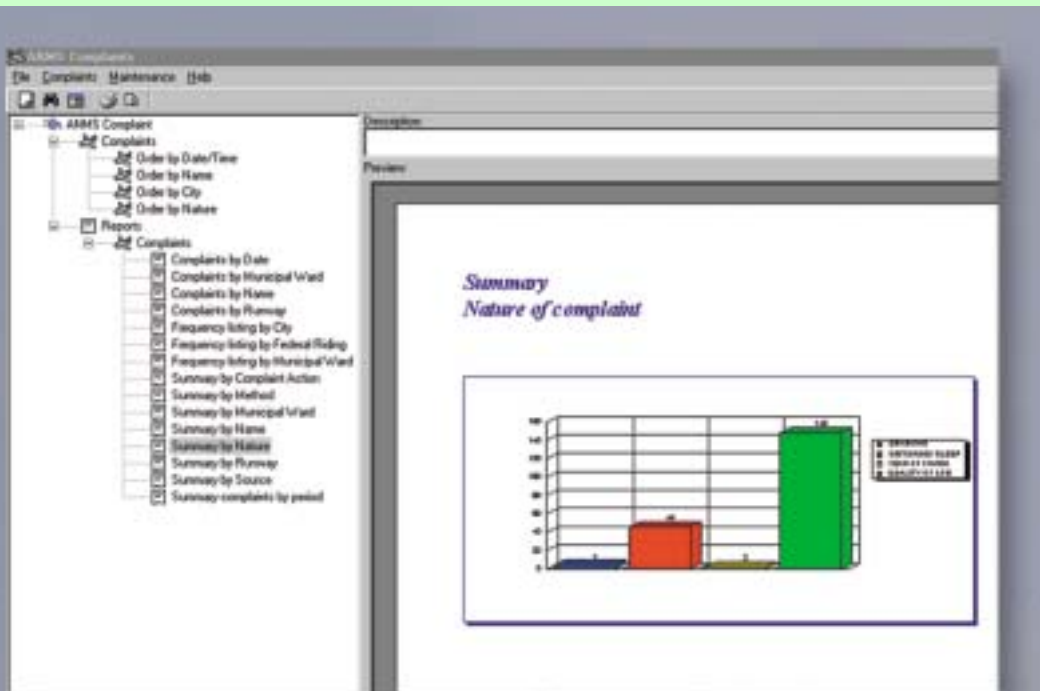


PRODUCT DATA

Complaints Module — Type 7833



Complaints Module Type 7833 provides dedicated data management, analysis and reporting of noise complaints made to airport operators.

You can now easily:

- register complaints in the database
- identify the offending aircraft
- link the information to the stored complaint record
- Inform the complainant of actions that have been taken
- Produce complaint reports and statistic
 - types of complaint
 - areas with most complaints
 - aircraft types causing complaints
 - runways creating complaints

The Complaints Module is a Windows® based software package for creating reports based on the stored data. The reports can be easily exported to other applications, attached to an e-mail or saved in html format.

Handling airport noise complaints has never been easier.

7833

USES ○ Systematic registration of complaints in a database

- Manages the workflow of the airport's noise abatement office
- Built-in analysis tool to identify aircraft creating excessive noise – link the information to the stored complaint record (requires installation of Noise Monitoring Software Type 7802 and Flight Tracking Module Type 7804)
- Inform the complainant about actions taken (standard letter included in Microsoft® Word format)
- Produce complaint reports and statistics
- Customise report layouts to your own corporate design

FEATURES

- Link to information stored in Noise Monitoring Software Type 7802 and Flight Tracking Module Type 7804
- Link to Microsoft® Word
- Tabular and graphical reports made in Crystal Reports™ environment
- Address matching using ArcView® GIS maps

Introduction

Fig. 1
Using the "Order
by Name" function,
allows you to easily
find all stored
complaints for a
specific
complainant

[illegible]

Complaints Module Type 7833 enables complaints made to an airport operator to be easily registered, stored in a database and classified, and appropriate actions to be taken – it is a complete noise complaint management program. The main functions are to:

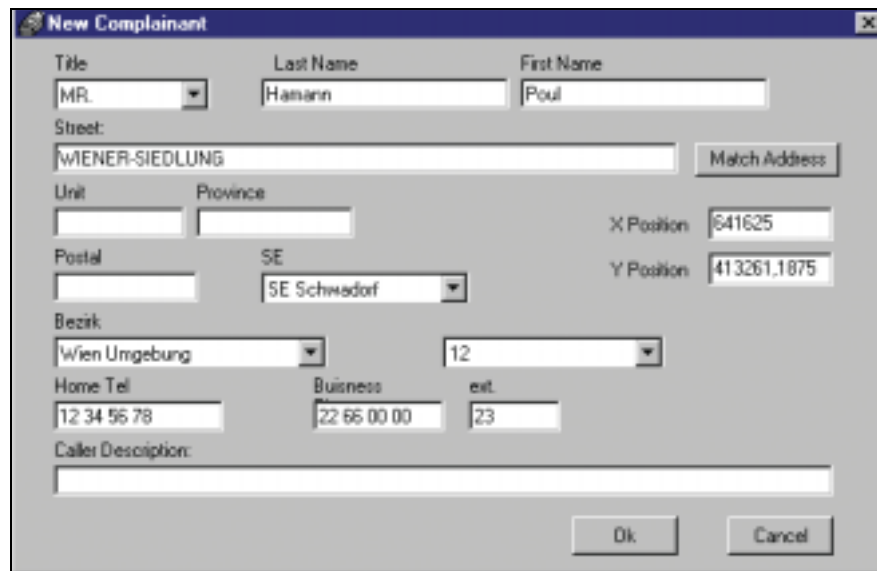
- Register complaints in the database
- Identify the offending aircraft and link the information to the stored complaint record
- Inform the complainant of actions that have been taken
- Produce complaint reports and statistics including:
 - Analysis of types of complaint
 - Identification of areas with most complaints
 - Identification of offending aircraft types
 - Identification of offending airlines

- Analysis of noise complaints according to the runways used
- Identification of people who complain frequently

Windows®-based software is used to create reports from the data stored in the database and the reports can be exported to other applications, attached to an e-mail or saved in html format for use on the internet.

Complaint Registration

Fig. 2
The details of new complainants can be quickly registered in the database

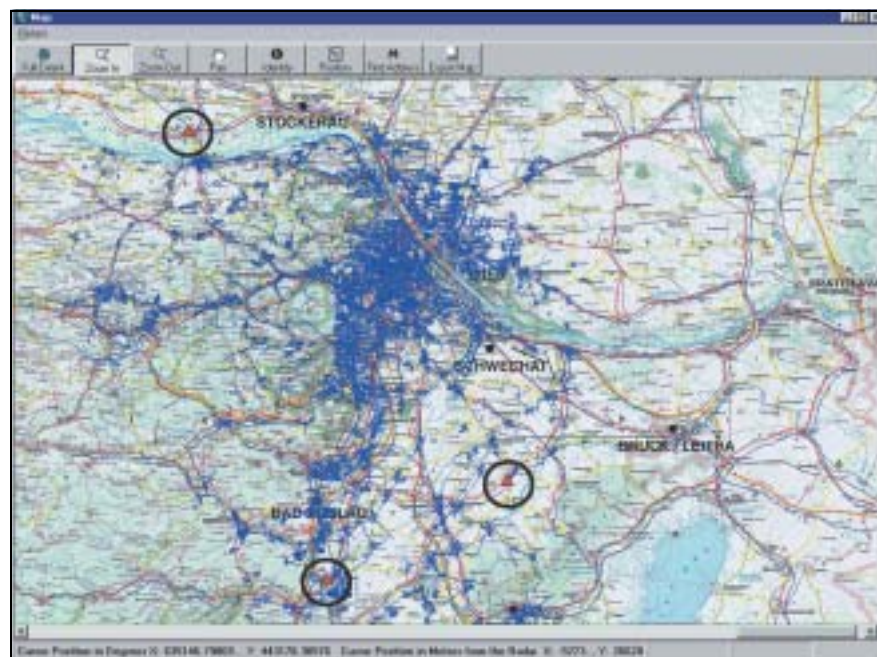


The screenshot shows a 'New Complainant' dialog box with the following fields and values:

- Title: MR.
- Last Name: Hamann
- First Name: Poul
- Street: WIENER-SIEDLUNG
- Unit: (empty)
- Province: (empty)
- Postal: (empty)
- SE: SE Schwadorf
- Bezirk: Wien Umgebung
- Home Tel: 12 34 56 78
- Business: 22 66 00 00
- ext.: 23
- Caller Description: (empty)
- X Position: 641625
- Y Position: 413261,1875
- Buttons: Match Address, Ok, Cancel

When a complaint is received, the database can be quickly browsed – is it a new complainant or are the complainants details already registered? Registration of new complainants is quick and easy. ArcView® GIS maps can be used to verify the complainant's address and existing background information from an existing entry in the database can be imported to save time.

Fig. 3
ArcView® GIS system maps can be used to verify a complainant's location. In this example choose which location is correct – around Vienna, three addresses named "Wiener-siedlung" can be identified



A description of the cause of the complaint is quickly added:

- The date and time of the noise event
- The source and nature of the complaint
- The type of response required, or which is appropriate (e.g., telephone, e-mail, letter)

Complaint Analysis – Management of the Work

Weather Information

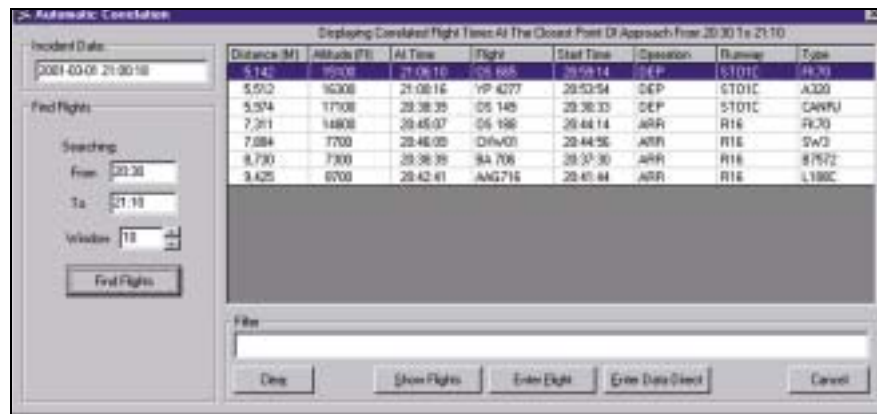
The prevailing weather conditions at the time of the complaint may, in certain situations, be highly relevant and additional information can be added to the database record including a record of wind speed and direction. If data from a weather station is available, this can be automatically transferred to the database.

The Offending Aircraft

A major task in the handling of aircraft noise complaints is to determine which flight caused the complaint. In Complaints Module Type 7833 this can be done using two procedures:

- Manual Correlation – a link to Flight Tracking Module Type 7804 can be used determine which flight caused the complaint
- Automatic Correlation – the flight details for the flight closest to the complainants address at the time of the complaint will be automatically transferred to the record in the database

Fig. 4
Information on the flight closest to the complainants address at the time of the complaint will be automatically displayed



The screenshot shows a software window titled 'Automatic Correlation'. It displays a table of flight data correlated to a specific incident. The incident date is '0001-03-08 21:00:10'. The table has columns for Distance (M), Altitude (FT), At Time, Flight, Start Time, Operation, Name, and Type. The data is sorted by distance, with the closest flight at the top.

Distance (M)	Altitude (FT)	At Time	Flight	Start Time	Operation	Name	Type
5.142	15000	21-06-10	OS 665	20:59:14	DEP	STOIC	H30
5.512	16000	21-06-10	YP 4277	20:52:54	DEP	STOIC	A320
5.574	17700	20:38:35	OS 145	20:38:33	DEP	STOIC	CANPU
7.311	14800	20:45:07	OS 196	20:44:14	ARR	R16	EC30
7.884	7700	20:46:00	Orinco	20:44:56	ARR	R16	SW3
8.730	7700	20:36:35	BA 706	20:37:30	ARR	R16	8752
9.425	8700	20:42:41	ANG716	20:41:44	ARR	R16	L180C

Below the table is a 'Filter' input field and several buttons: 'Close', 'Show Flights', 'Enter Flight', 'Enter Data Direct', and 'Cancel'.

Noise Event Detection

Having determined which flight has caused the complaint, you can find the highest noise event which is correlated to that flight, using the data from Noise Monitoring Software Type 7802. This enables you to check if the aircraft noise was within or outside the mandatory levels applicable at the complainant's location.

Fig. 5
Storage of flight details and the level and position of the noise event causing the complaint

Complaint Management: Flight

Complainant	Description	Weather	Flight	Status
Flight No	YP 4277	Time at CPA	21.00.16	
Runway	STOIC	Operation	DEPARTURE	
Aircraft Type	A320	Altitude	UNKNOWN	
Origin	LOWW	Destination	EDDT	
Altitude At	16300	3D Distance	5.512	
		Deviation		
Max	72.5			
At NMT	11			

Flight Analysis:

Automatic Correlation

Manual Correlation

Noise Analysis:

Correlate

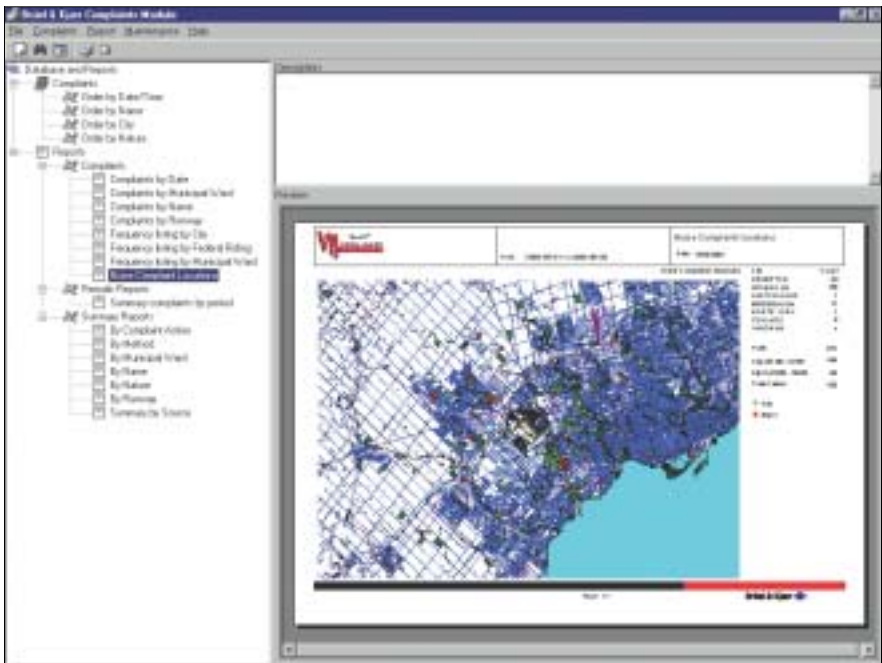
Cancel Previous Next Save

Response

If you decide to send a written reply to the complainant, you can use the standard letter template which is linked to **Microsoft® Word**. The type of action you choose to take is recorded in the database.

Reporting and Statistics

Fig. 6
An example of a Noise Complaint Locations report



The left-hand area lists all available reports. The reports are grouped into a number of categories. You can very easily create new categories or remove existing ones. When browsing between reports in a category, the chosen report appears in preview format

in the lower-right area of the display. The upper-right area of the display gives you a description. Fig. 6 shows an example of a Noise Complaint Locations report.

It is very easy to generate a report based on data stored in the Noise Monitoring System's database. Simply select one of the reports in the left-hand pane and data selection starts. The reporting wizard is a tool which helps you, step-by-step, to create data selection criteria or to reuse one created earlier. Refer to the Product Data for Reporting Module Type 7832 for further details.

There are three types of report:

Listing Reports

Records are shown, line by line, in tabular format in all reports. Data can be sorted by:

- Runway number
- Surname
- City name
- Area code

The most advanced report is the noise location report, as shown in Fig. 6. Each complaint is shown as either a red or a green box, superimposed on a GIS map. The red and green colours indicate whether the disturbing noise event occurred during the day or night. The results are displayed on the right of the display.

Periodic Reports

Reports of this type have built-in functionality. Based on selected data, you can evaluate the data from different perspectives. You can find a pattern by sorting data using the following criteria:

- Airline company
- Aircraft type
- Runway used
- Location, etc.

You can choose whether the program makes calculations on a daily, weekly, monthly or yearly basis.

Summary Reports

Reports in this category show the selected data in both tabular and graphical format. The program includes seven types of summary report:

- Action – make a report showing which type of feedback you choose, e.g., telephone call, mail, fax, no action
- Method – who received the complaining call at your office
- Source – description of the disturbing noise, e.g., too loud, overflight, helicopter
- Nature– type of complaint
- Area
- Runway
- Name – people who complain most frequently

All reports can be saved in a number of ways as described in the Specifications.

The predefined layout can be modified and new reports can be added to the Complaints Module (a Crystal ReportsTM licence is required). Brüel&Kjær can customise reports on request.

Specifications – Complaints Module Type 7833

Input Requirements

Data files stored in the Noise Monitoring Software Type 7802 and Flight-data Option Type 7804 (as described on page 2)

Database

All information is stored in a Microsoft® Access database

Tabular Reports Included

See attached documentation

Graphical Reports Included

See attached documentation

Report Window

Crystal Reports™, run-time environment

Output Format

Character-separated values, Comma-separated values (CSV), Crystal Reports™ (RPT), Data Interchange format (DIF), Excel 2.1-8.0 (XLS), HTML 3-0-3.2, Lotus® 1-2-3 (WK1), ODBC, Paginated text, Record style, Rich Text format (RTF), Tab-separated text, Tab-separated values, Text, Word

Output Destination

Application, Disk file, Exchange folder, Lotus Notes® Database, Microsoft® Mail (MAPI)

Platform

32-bit software running under Windows NT® and Windows® 2000

Ordering Information

Type 7833–001: Complaints Module, English Language

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