# **Review of VS Accident Investigator**

by Mark H. George Accident Investigation Services Pty Ltd, Sydney, 2001 published in the Australian Investigator Journal - Issue 7, 2001.

**STOP!** don't skip reading this review just because you're not an accident investigator. Whilst VS Accident Investigator is primarily designed for the accident investigation industry, if you're involved with factual investigation of matters such as personal injury, fraud, theft, worker's comp accidents, arson or water damage, then you should have a close look at what this program has on offer.

Overall, this is a great product for the private or police accident investigator, particularly those with little or no computer aided drawing (CAD) experience. But its not all about CAD. The program also offers other great supportive modules for experienced technical investigators such as an automated measurement log system, a substantial US vehicle data base, together with a motion calculator and interviewing module, all housed within a very user friendly environment.

## **Computer Aided Drawing Module**

If there was ever a CAD program for anyone to get started on, then look no further. This is an easy to use drawing program that will have you creating professional looking diagrams from day one. With a simple drag and drop tool bar, you can draw lines, arrows, symbols, curves, text, dimensions, or select from a number of object libraries such as fire, crime, road, intersections, vehicles, victims, signs or crash scene.

The dimension properties of objects can be edited at any time to reshape, resize, change colour and/or rotate them. A particularly useful feature of the program is the Show Damage function which enables you to click and drag vehicle shape control points to show a plan view of the vehicle's damage profile.

For those of you with a little more drawing or site mapping experience, you can manually enter your field measurements directly into a computer generated measurement log and have your scene drawn in seconds with the Autodraw function. For those of you using more advanced survey instruments such as laser or total station, your electronic field data can be imported directly into the program's measurement log and quickly processed using Autodraw.

## **CAD** Limitations

As a CAD program, VS Accident Investigator does have some limitations, but the developers, who are focussed on Accident Investigation, are constantly reviewing and improving the program and have indicated they have some innovative upgrades underway.

If you're already up and running on drawing programs such as AutoSketch or more complex CAD programs, then I'd certainly recommend you stick with them for the time being. However, there is no doubt that the VS Accident Investigator drawing module is an excellent CAD program to get started on, and is one which is capable of producing accurate and professionally presented diagrams.

# Some Pros and Cons of the CAD module

#### Pros

- 1. Individual lines can be edited at any time to change line type/style, thickness, colour, length, angle, and/or location.
- 2. There is an offset line drawing function which can be used for drawing parallel lines, such as kerb and gutters, footpaths, property boundaries etc.
- 3. Multiple objects can be selected and dragged to different locations in the drawing.
- 4. Objects can be selected and rotated.
- 5. The dimension function is simple to use, just drag you mouse between the two points you wish to measure and your scaled measurement is inserted automatically.
- 6. A text tool allows to you place text on to the diagram which can then be resized, moved, rotated and/or coloured.
- 7. The program has a great database of American vehicles between 1971 and 2002. For basic accident investigation diagrams however, generic vehicles can be used and quickly edited into the correct dimension for whatever Australian vehicle dimensions you wish to represent.
- 8. Vehicles can be illustrated in a host of different colours and basic damage profiles can be illustrated.
- 9. A plan view of a vehicle's damage profile can be illustrated with the Show Damage feature.
- 10. Field measurements can be entered or imported directly into a measurement log and drawn with the Autodraw function. The measurement log can be printed for court use.
- 11. Title block creation is done automatically. Simply enter the relevant information into the specific fields.

#### Cons

- 1. The copy function only works with one shape at a time, and is immediately pasted into the plan adjacent the copied shape. It then has to be dragged to the appropriate position.
- 2. There is no grouping function.
- 3. There is no layer function.
- 4. There is a snap to grid function, but no line or object snapping function.
- 5. There is no undo or redo function.
- 6. There are no shortcut key functions, i.e. most functions are mouse driven.
- 7. You can delete objects with the delete key or from the menu, but there is no cut and paste function.
- 8. There is no lines break, trimming, edging, bevelling, rounding etc functions.
- 9. Panning and zoom functions cannot be done from the keyboard and must be achieved with the mouse.
- 10. Text cannot be preset to a font size. It is resized by dragging control points.
- 11. Text cannot be edited. If you make a mistake or wish to change the text, it must be deleted, re-entered, resized and positioned.

# **Future Upgrades**

The program developers have indicated that 3D vehicles and a 3D viewer will be added in the version 2 release due October 2001, and 3D animation will be released from the same platform in January 2002. You will also be able to save edited vehicle shapes with a name in the "custom vehicle" list. Australian vehicles could be added to the program's vehicle database in the future if there are sufficient sales.

A number of additional CAD features such as snap to end points, layering, undo and allowing the 3rd dimension in terms of survey points will be released in their version 3 in February 2002.

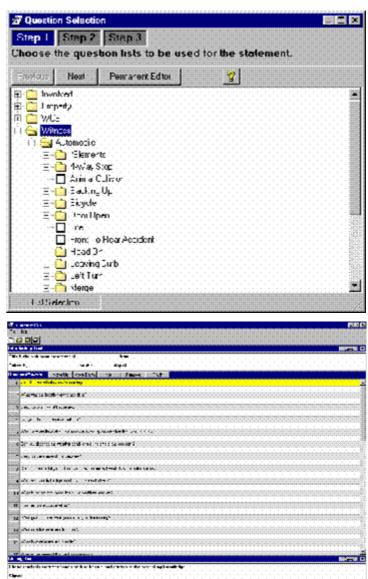
### **Interview Pro**

This module of the software is most impressive and very user friendly. Essentially, it quickly generates a multitude of interviewing questions for different investigation profiles.

Whether you have a property, work or motor vehicle related investigation, or perhaps a theft, fire or water damage investigation, you simply select the relevant profiles of the incident and an interview questionnaire is generated in seconds.

For CTP Personal Injury Investigators, you can select one or a combination of accident profiles by vehicle type, witness type or type of collision. You can also select various vehicle to vehicle accidents, vehicle to pedestrian, vehicle to animal etc. Go further and select vehicle profiles for a host of relevant questions on vehicle mechanical condition, seat belts, air bags, black boxes, brakes, steering, etc

You can then edit the questionnaire any way you want. You can add, delete, move or alter questions to suit your particular



needs, or you can create your own profile list using the program's Permanent Editor.

The program then generates a record of interview type format which is automatically moved into the program's word processing module and can then be saved in Rich Text Format .rtf.

From here you can open the file with any WP software that supports rtf, such as Wordperfect, Microsoft Word or Word, and make any necessary adjustments to the interview format, or simply create a check list of questions for preparing a statement.

# **Visual Analyst**

The Visual Analyst module of VS Accident Investigator is a user friendly calculation program that contains most of the linear motion equations used by advanced accident investigators and reconstructionists.

The module includes a handy road friction table, metric conversions, applications of acceleration, skidding, vehicle yaw, momentum, kinetic energy, damage, bicycles, motorcycles, pedestrians, rollovers and fall equations.

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Whilst this module may not be for everyone, it will give less experienced investigators a reasonable appreciation of what is involved in advanced applications of accident investigation. The help file is particularly useful with step by step instructions and a glossary of accident investigation terms. This module would be particularly useful to study if you're considering increasing your knowledge in the field or attending one of the advanced accident investigation courses now available in Australia.

# Overall

A valuable and relevant tool for police accident investigators and private investigators involved in personal injury matters.