Image Cover Sheet

CLASSIFICATION	SYSTEM NUMBER
UNCLASSIFIED	516662

TITLE

Tactical situation analyst user's guide

System Number:

Patron Number:

Requester:

Notes:

DSIS Use only:

Deliver to: CL

This page is left blank

This page is left blank

Tactical Situation Analyst User's Guide

Submitted to: Defence Research Establishment Ottawa
Ottawa, Ontario
Software Kinetics Document No. 1600-155-017 Version Draft 01
Copy #1 31 March 2000

DRAFT

TACTICAL SITUATION ANALYST USER'S GUIDE

31 March 2000

Contract No. W7714-8-0192

Prepared For:

Mr. Derek Elsaesser *Scientific Authority*
Defence Research Establishment Ottawa
Electronic Warfare Division
Ottawa, Ontario

Prepared By:

Software Kinetics Ltd.
65 Iber Road
Stittsville, Ontario, Canada
K2S 1E7

Software Kinetics Ltd Document No. 1600-155-017 Version Draft 01

Document Approval Sheet

Document No. 1600-155-017 Version Draft 01

Document Name: Tactical Situation Analyst User's Guide

Approvals	**Signature**	**Date**
Author	Elizabeth Roy	09 Apr 2001
Manager, Land EW Systems	Luc Dumouchel, P. Eng	9/4/01

Document Revision History

Revision	Reason for Issue	Origin Date
Draft 01	Draft document issued.	31 March 2000

TABLE OF CONTENTS

LIST OF FIGURES

1 INTRODUCTION

1.1 The IEW Simulator System Overview

Copy from IEW Simulator User Guide

1.2 The TSA Station Overview

The purpose of this station: receiving assessments from the EWSA stations, publishing it to the ASIP.

1.3 The other stations

A brief description of the other two stations from the point of view of the TSA – what they provide to each other during a simulation.

2 STATION BASICS

2.1 Font Set

The IEW Simulator, EWSA and TSA support the APP-6A military symbol set. It is implemented as a special font, which should have been loaded during the installation process. However, if the set is not properly loaded, an error message will occur when any maps or browsers requiring the font set are opened.

To load the font set, copy (Ctrl-C) the fonts from the installation directory under "fonts" and paste (Ctrl-V) them into the fonts directory. This directory can be located by clicking on the Start button on the Windows toolbar. Click on "Settings >> Control Panel". Double click on the Fonts directory.

2.2 Conventions

2.2.1 Dates

Some fields which display dates and accept dates as input use the DTG (Date Time Group) format. This format uses two digits for the year, which does not conform to Year 2000 guidelines for specifying years. For example, 29 October 1999 12:00 p.m. local time is represented as "291200L OCT 99".

The software handles two digit date input by assuming a 100 year sliding window, i.e. the year is assumed to be within 50 years of the **current** year. Therefore, if today is 29 October 1999 and the data "181200L NOV 02" is entered, the year is assumed to be 2002, rather than 1902.

2.2.2 File Prompter Dialog

Several browsers use a file prompter dialog for specifying the file to save data to or load data from. The dialog is shown below.

Figure 2-1 File Prompter Dialog

The text on the top left gives the current directory. The large pane under it displays directories under the current one. Double-clicking on an entry in this list will make that directory the current one. The bottom left field labeled "Drives" contains a pop-up list of all of the drives on the machine. Clicking on the down arrow to the right of the field pops up the list. Highlight an entry in this list to switch to that drive.

The panes on the right specify files. The middle pane lists files in this directory. The list is filtered by the criteria shown in the text pane at the bottom right labeled "Files of Type:". The filter is usually set to the appropriate extension for the file being saved or loaded, e.g. EMT for emitter types. Clicking on the down arrow to the right of the field displays the other filters available. Usually the only other filter is All Files (*.*). Once the appropriate files are displayed clicking on a file name selects it. Its name is filled into the text field at the top right, labeled "File Name:". Double clicking on the file name selects the file and accepts it as the current file. It is equivalent to selecting the file and clicking "OK".

As an alternative to selecting a file from the list the name may be typed directly into the "File Name" field. This is necessary when saving new files. In this case the field is created in the directory shown at the top left.

Once the right file name appears in the "File Name" field select the file by clicking "OK". Click "Cancel" to close the dialog and cancel whatever action required the file name.

2.2.3 Dialog and Prompter conventions

Throughout this document some shorthand is used for ease of reference.

The terms dialog and prompter are used interchangeably. These refer to small windows which pop up, usually requesting information from the user. In general dialogs present information and ask the user to make a choice. Prompters require the user to type in information.

Some dialogs are as simple as asking whether to continue with an operation, and asking for a "Yes" or "No" answer. In these cases, "No" will usually close the dialog without making any changes. If the "No" option is not explained in the document assume this is the case. If "No" has some other effect it will be discussed in the text.

In cases where a "Cancel" button is available in a prompter selecting it will close the dialog without making the change. This is usually not explained.

Some prompters are multi-page prompters. They request a lot of information from the users, so rather than present all of the information required at one time the user sees only a few items at a time. These prompters have three buttons: "Next", "Back" and "Cancel". Use "Next" and

"Back" to move back and forth between the pages while entering the correct data. To complete entering data use the "Next" button to go to the last page of the prompter. On this page "Next" is replaced by "Finish". Use this to accept all of the changes. Use "Cancel" to close the prompter without saving any of the data.

Some prompters check the format of entered data before closing. If the data is improperly formatted or mandatory information is missing the prompter does not close. The incorrect data is highlighted. An error message may or may not appear indicating what is wrong with the data format. In general if there is default information in a text pane when the prompter opens use that data as a guide to the expected format of the data.

2.2.4 Menu Conventions

Throughout this document where the text says "Click on the widget" it means use the left mouse button to click. However, where ever it refers to bringing up a pop-up menu it means click with the right mouse button.

Some information panes on browsers have pop-up menus. The pop-up menus usually also appear on the menu bar at the top of the browser. The name of the menu which is used as a pop-up is included in a description of the pane. The pop-up can be used in any place where the menu name is given in instructions for performing an action.

Some menus have sub-menus. These are indicated by an arrow pointing to the right at the right edge of the menu. To open the sub-menu drag the mouse to the right of the menu option. In the case where the menu is at the right edge of the visible area of the screen drag the mouse to the left to bring up the sub-menu. To save explanation in the text sub-menu options are specified using a double arrow ">>" notation. For example, the Tools menu has an option "Configure" with a sub-menu listing the databases which can be configured. The Gazetteer Database is one of the databases that can be initialized. The explanation of how to initialize the Gazetteer Database would say: From the Tools menu select "Configure >> Gazetteer".

3 GETTING STARTED

3.1 The Launch Pad

Buttons left to right and a brief description of their browsers.

3.2 Configuring the station

3.2.1 LAN Networks

To run a simulation the network addresses of the other stations must be configured. This is done in the Network Connections Browser.

To open the Network Connections Browser select "Configure >> Networks" from the Tools menu. A warning dialog opens stating that this should only be performed by an experienced user. Click "OK" to proceed. The browser is shown below.

Figure 3-1 Network Connections Browser

There is one entry in the Networks list and one entry in the Connections list. Click on the network entry. A list of addresses appears in the right-hand pane. The columns are labeled Station, Type, Address and Port. The IEW-SIM station address has a letter "L" to the left of it to indicate that this is the local address.

While this browser supports a number of different functions, only those needed to set up the Simulator are discussed here. By default the address list contains an entry for the IEW-SIM, one TSA station and one EWSA station. All three addresses are set to the local machine. To run an exercise the addresses of the stations need to be edited to point to the correct machine, and new EWSA addresses need to be created.

The changes to the network configuration are saved when the Network Connections Browser closes.

3.2.1.1 Adding an EWSA station address

By default only one EWSA station address appears in the list. If more than one EWSA station runs during an exercise a new entry must be made for each station.

From the Address menu or the pop-up menu in the address pane select "Create". A prompter opens asking for the Station Name, Station Type, IP Address and Port. Use the down arrows to the right of the Station Name and Station Type fields to view the pre-defined choices.

The drop-down list for Station Name defines EWSA1 to EWSA4. Select the appropriate name, or if required type in a new name. Set the Station Type to EWSA.

The IP Address field defaults to the local machine name. Enter either the machine name or the IP Address of the machine. Leave Port set to <default>. Click "OK". A confirmation dialog appears asking if the default port should be used. Click "OK".

Note that these instructions can be used to add an address for any other type of station address as long as the correct station type and IP Address are used. *Always use the default port.*

3.2.1.2 Editing the IEWSIM station address

These edit instructions cover how to edit any address on the machine.

Select the IEWSIM address in the list. From the Address menu or the pop-up menu in the address pane select "Edit". A prompter opens. Edit the IP Address field by entering the machine name or the IP Address of the IEWSIM machine. *Always use the default port.* Click "OK" to save the changes.

3.2.2 Station Configuration

3.3 Other utilities available from the Tools Menu

3.3.1 Convert Lat / Long

The Simulator provides a function to convert between UTM and Latitude / Longitude co-ordinates. From the Tools Menu select "Convert Lat/Long <-> UTM". The conversion dialog opens.

Figure 3-2 Lat / Long <-> UTM Converter

Enter the UTM co-ordinates in the top field. Press the "UTM -> LL" button. The lat/long co-ordinates appear in the bottom field. Note that the latitude and longitude are represented as decimal values, not degrees minutes seconds.

To convert Latitude and longitude to UTM enter the data in the lower field. The values must be decimal values, not degrees minutes seconds. Press the "LL->UTM" key. The correct values appear in the top field.

To close the dialog press "Done".

3.3.2 Set Date / Time

To set the date and time used by the station open the Tools Menu and select "Set Date/Time". A dialog opens asking for date and time information. Edit the date, time and time zone offsets as needed. The Time Display field has a drop down list with Local and Zulu as the two options. Select the format for displaying time. Click "OK" to close the prompter.

3.3.3 Backup Databases

Select the option "Backup Databases" to save the contents of the all of the databases to file. The files are in the autosave directory under the directory where the TSA application software resides.

3.3.4 Always on top

By default the launch pad always appears on the screen. Any windows which overlap with it appear underneath it. In this way the launch pad can always be found

To change this so that the launch pad behaves like a normal window go to the Tools Menu and select "Always on Top". A check mark appears next to the menu option to indicate the launch pad's status. It appears when the launch pad is on top.

To make the launch pad always appear again select the "Always on Top" menu option again.

3.3.5 Database management

Four of the databases in the TSA application can be saved to disk, loaded from disk, initialized and deleted. The databases are:

- the Tactical Database – information on enemies: units, emitters, DF Fixes, etc.
- the Overlay Database – map annotations, not published data from the EWSA stations

- the Reports Database – messages sent by other stations, TACREP
- the Emitter Types Database – types of emitters; used in assessments

The directory where the databases are saved is specified in the station configuration. See the section above for more details on Station Configuration.

3.3.5.1 Saving a database

From the Tools Menu open the "Save" sub-menu. Select the database type from the sub-menu. A File Prompter Dialog opens to the default directory for that database type. Specify the file name for the new file.

If a file by that name exists a dialog appears asking if the existing file should be over-written. Click "Yes" to save the file using that name. Click "No" to close the warning dialog. The File Prompter Dialog remains open. Enter another file name if necessary or click "Cancel" to close.

3.3.5.2 Loading existing databases

From the Tools Menu open the "Load" sub-menu. Select the database type from the sub-menu. A File Prompter Dialog opens. Select the file to load. A confirmation dialog opens asking whether to replace the existing database. Click "Yes" to replace the current database with the one from file. Click "No" to abort the load.

3.3.5.3 Deleting saved databases

From the Tools Menu open the "Delete" sub-menu. Select the database type from the sub-menu. A dialog opens containing a list of the files in the default directory for that database type. Select the files to be deleted and click "OK". The files are deleted from the directory.

3.3.5.4 Initializing databases

Initializing a database deletes all data currently in the database. From the Tools Menu open the "Initialize" sub-menu and select the database type from the sub-menu.. A confirmation dialog appears asking whether to proceed. Click "OK" to initialize the database.

3.3.6 Equipment Symbols

The Simulator uses the APP-6A military symbol set for equipment. The Equipment symbols can be edited using the Symbols Browser. Select "Configure >> Equipment" to open the Symbol Editor for Equipment Symbols. See the section below for a full discussion of the use of this browser.

3.3.7 Gazetteer

The Gazetteer Browser allows the user to create and edit map locations. These locations are used for positioning the map browsers. These locations can be used from an open map window to change the location shown. The default location used by new map browsers is specified in the Station Configuration. To change the default see the section on Station Configuration above.

To open the Gazetteer Browser from the Tools Menu select "Configure >> Gazetteer". The browser opens.

Figure 3-3 Gazetteer Browser

The Gazetteer pull-down menu is also available as the pop-up menu in the list pane. A list of pre-defined locations appears in the list pane. The name of the area appears in the left column. The centre location appears in the right column. Editing these locations is described below.

3.3.7.1 Adding a new location

From the Gazetteer menu select "Add". An information prompter opens. The "Area" field is the name for this location. Location should be a geographic location in UTM co-ordinates. Datum is the particular map used to create the coordinates being used at this location. The drop-down list shows the datum supported by the Simulator.

Once the data is correct click "OK".

3.3.7.2 Editing a location

To edit a location select it in the list. From the Gazetteer menu select "Modify". Change the parameters as needed.

NOTE: Editing the pre-defined locations is not recommended.

3.3.7.3 Deleting a location

Select the location in the list. From the Gazetteer menu select "Remove". A confirmation dialog appears asking whether to proceed. Click "OK" to delete the entry.

3.3.8 Symbols (Units)

The Simulator uses the APP-6A military symbol set for units. The Unit symbols can be edited using the Symbols Browser. Select "Configure >> Symbols" to open the Symbol Editor for Unit Symbols. See the section below for a full discussion of the use of this browser.

3.3.9 Emitter Types

The Emitter Types Database contains types of emitters which are used in forming assessments. To see the database browser open the Tools Menu and select "Configure >> Emitter DB". See the section on the Emitter Types Database below for information on this browser.

4 PERFORMING ANALYSIS DURING A SIMULATION

4.1 Setting up the map

4.1.1 Opening a Map Browser

Click on the map button on the Launch Pad. A map browser opens.

Figure 4-1 Situation Map Browser

The buttons across the top of the map are used to perform special functions

4.1.2 Setting the location of the operation

When a map browser opens the map is centered on the default gazetteer location. This is set in the Station Configuration browser. See the section on Configuring the Station for more information on changing the default location.

4.1.2.1 Setting the area of interest

To change the area of interest to one of the entries in the gazetteer select the drop down list indicator next to the location field. A list of the pre-defined gazetteer locations appears. Select the appropriate location. The map location changes. This change only affects this map. See the section on the Station Configuration for information on changing the default location every time a map is opened. See the section on the Gazetteer for information about adding entries to this list.

4.1.2.2 Scrolling the map

To make small adjustments in the area shown on the map right-click on the map and drag the mouse across the map. This will drag the map in the direction the mouse moves, i.e. if you drag the map to the right, the area shown moves to the right, and area to the left of the map becomes visible.

To move farther across the map from the Map menu select "Scroll to Location". A text prompter opens with the current location in UTM co-ordinates. The drop-down list contains the locations

defined in the gazetteer. Type in the new location in UTM co-ordinates or select an entry from the list. Click "OK". The map is re-positioned.

4.1.3 Map operations and menus

The Map menu is the pop-up menu for the map pane. Scenario object graphics and overlay symbols on the map have their own pop-up menus. To open a graphic's menu select the graphic. Position the cursor over the graphic so that cross hairs appear and click the right mouse button. This requires accurate cursor placement over objects such as networks, which are represented as lines.

Map objects can also be selected by drawing a box around them. To do this click the left mouse button at what would be one corner of a box surrounding the object. Drag the mouse to the diagonally opposite corner of the box. A dashed line appears showing the box. When the mouse button is released all objects completely surrounded by the dashed lines are selected.

4.1.4 Adding Annotations – Overlays

In addition to objects used to simulate a battlefield scenario the map displays features used to mark areas of interest. These features are referred to as overlays. These include lines, circles, FEBAs, and arrows. Overlays are saved in a database which can be saved to file or loaded into another editing session or station. The overlay database can also be initialized to delete all current overlays. See the section on Overlays above for more information.

All overlay elements can be added using either the Annotations menu options or one of the buttons at the top of the map area. The button labels show a small picture of the feature they create.

Special editing options for overlays are discussed in the section on creating the overlay. Editing options common to all overlays are discussed below. Note that these editing options apply to the appearance of the overlay. Once it is drawn an overlay cannot be moved or made a different size. It can be deleted and a new overlay created.

4.1.4.1 Line, FEBA, Linear Obstacle, Anti-tank ditch

Lines, FEBAs, Linear Obstacles and Anti-tank ditches are drawn as a series of segments. The cursor is used to select a number of points by clicking on the map. A line is drawn from each point to the next one the user specifies. A FEBA is drawn as contiguous semi-circles. Linear Obstacles are drawn as a saw-toothed line. An anti-tank ditch is drawn as a line with small

triangles pointing out. The points on linear obstacles and anti-tank ditches can be switched from one side of the line to the other using an option on the graphic's menu. This is discussed below.

To add one of these linear features use either the menu option or the appropriate button. A dialog opens prompting for a description of the new overlay. This description is shown in the text pane of the map browser whenever the overlay is selected on the map. Enter the description and click "OK". The cursor becomes a cross-hair. Click once on the map to indicate the first end-point of the feature. A dashed line extends from the end-point to the cursor's current position. Re-position the cursor and click again. Continue until the entire feature has been drawn. Double-click on the last point to complete drawing the feature. The dashed line is replaced with the symbol for the new feature.

FEBAs, linear obstacles and anti-tank ditches are directional symbols. The direction of the graphic is the side of the line where the triangles, saw-tooth edges or scallops appear. The direction of a graphic can be changed from the graphic's menu. Select the overlay and pop-up the menu. Select "Change Direction". The line is re-drawn.

Anti-tank ditches have one more special feature. A completed ditch is represented by filling in the triangles. By default a ditch is drawn as incomplete, so the triangles are empty. To indicate that the ditch is complete select its graphic. From the pop-up menu select "Completed". The triangles are filled in. To change the status back to incomplete select the "Completed" menu option again. The line is redrawn.

4.1.4.2 Circle

To add a circle select the menu option or button. A dialog opens prompting for a description of the new overlay. This description is shown in the text pane of the map browser whenever the overlay is selected on the map. Enter the description and click "OK". The cursor becomes a cross-hair. Click once for the centre point of the circle. Click again to set the radius of the circle.

4.1.4.3 Arrow

To add an arrow select the menu option or button. A dialog opens prompting for a description of the new overlay. This description is shown in the text pane of the map browser whenever the overlay is selected on the map. Enter the description and click "OK". The cursor becomes a cross-hair. Click once to indicate the tail of the arrow. A dashed-line arrow appears to indicate what will be drawn after the second click. Click again to indicate the head of the arrow. The arrow points from the first click location to the second.

4.1.4.4 Rectangle

To add a rectangle select the menu option or the button. A dialog opens prompting for a description of the new overlay. This description is shown in the text pane of the map browser whenever the overlay is selected on the map. Enter the description and click "OK". The cursor becomes a cross-hair. Click on the location of one corner. A dashed line extends from the first corner to the cursor. The dashed line represents one side of the rectangle. Click to indicate the second corner. Now when the cursor moves a rectangle appears. Click again to set the second dimension of the rectangle.

4.1.4.5 Text

To add text to the map select the menu option or the button with the letter "A" in it. A dialog opens prompting for the text. Enter the text that should appear on the map. Click "OK" to close the dialog. The cursor becomes a cross-hair. Click on the location on the map where the left edge of the text should appear.

NOTE: The font size is determined by the map scale. It cannot be changed by the user.

To edit the text select it on the map. Pop-up its menu and select "Edit Description". A text prompter opens containing the text. Change it as needed and click "OK".

4.1.5 Editing Overlays

4.1.5.1 Changing colour

Select the overlay. Pop-up the overlay's menu and select "Change Colour". A dialog opens with a set of colours. An "X" appears on top of the current colour of the overlay. Select the new colour and click "OK". The overlay is still selected. Click somewhere else on the map to de-select the overlay and see its new colour.

4.1.5.2 Changing line thickness

Select the overlay. Pop-up the overlay's menu and select "Change Line Thickness". A text prompter opens. Enter a number between 1 and 20 and click "OK". The overlay is re-drawn with a different size line.

NOTE: This option is not available for text overlays.

4.1.6 Push To Back

If several objects appear at the same location the map may be cluttered. Objects are stacked on the map in the order in which they were drawn. To make it easier to see a particular graphic the others may be pushed back, or moved under the other graphics at that location.

To push an overlay to the back select it. Pop-up the overlay's menu and select "Push To Back". The graphic is re-drawn.

4.1.7 Deleting Overlays

Select the overlay. Pop-up the overlay's menu and select "Delete Overlay". A confirmation dialog opens asking if it should delete the overlay. Click "Yes" to delete. The overlay disappears from the map.

To delete several overlays at once select them from the map. From the Map menu select "Delete Selected". A confirmation dialog opens asking if it should delete all selected models. Click "Yes" to delete all selected objects. This may include both overlays and scenario objects. The selected objects disappear from the map.

To delete all overlays on the map at once go to the launch pad. From the Tools Menu select "Initialize >> Overlays". A confirmation dialog opens asking whether to initialize the overlay database. Click "OK" to proceed. All overlays on any open map browser disappear.

4.1.8 Loading map information

If map data is available for the area of interest it may be loaded into the builder and the simulator. The map data path must be configured. See the section on configuring the station for more details.

On the map browser click the Map button. It is the button with the globe on the left side of the browser. The map appears in the background. Press the button again to hide the map.

If the map directory has not been set correctly or there is no map for this location and scale an error dialog appears indicating that the directory does not exist, or that no map exists for this location and scale. The background of the map remains black.

4.1.8.1 Adjusting the map brightness

If the map is too bright it may be difficult to see the scenario object symbols on the map. The vertical scroll bar to the right of the information window at the bottom of the map controls the brightness. Drag it downwards to dim the map. Drag it upwards to brighten the map.

4.1.9 More map setup options

** ADRG

Display Elevations

4.1.10 Viewing 3D area information

If ** DTED data is available for the area of interest it may be viewed to gain an idea of the relative elevations of the area. The DTED information path must be configured. See the section on configuring the station for more details.

From the ** Map menu select "View 3D Elevation". A 3D viewer opens for the area of interest. Use the dials on the bottom and left of the image to rotate the view. Use the dial on the right to zoom in and out.

** Other options for this browser?

4.1.11 Printer Setup

**

4.1.12 Print

4.1.13 Push to back

4.1.14 Show info

4.1.15 Hide Networks

4.1.16 Elevation Lines

4.2 Receiving data during a simulation

4.2.1 The Overlay Manager

Data received from EWSA stations is stored in overlays. These are similar to the overlays used for map annotations.

4.2.1.1 Opening the Manager

From the Map menu select "Sheets" or click on the Overlays button on the Map Browser.

5 OTHER BROWSERS

5.1 Sensor Database

5.2 Messages Browser

5.3 Mail Browser

5.4 Friendly Browser

REFERENCES

1. "EW Battlefield Simulator User's Guide", Software Kinetics Limited Document #1600-136-012, April, 1997

2. "Intelligence Electronic Warfare Battlefield Simulator User's Guide", Software Kinetics Limited Document #1600-155-015, March 2000

3. "Electronic Warfare Sensor Analyst User's Guide", Software Kinetics Limited Document #1600-155-016, March 2000

DOCUMENT CONTROL DATA

1. ORIGINATOR Software Kinetics Ltd 65 Iber Road Stittsville, Ontario Canada K2S 1E7	**2. SECURITY CLASSIFICATION** UNCLASSIFIED

3. TITLE

Tactical Situation Analyst User's Guide (U)

4. AUTHORS

Roy, Elizabeth, A

5. DATE OF PUBLICATION April 9, 2001	**6a. NO. OF PAGES** (total containing information Include Annexes, Appendices, etc.) 20	**6b. NO. OF REFS** (total cited in document) 3

7. DESCRIPTIVE NOTES

User's Guide

8. SPONSORING ACTIVITY

Defence Research Establishment Ottawa
Department of National Defence
Ottawa, Ontario Canada K1A 0Z4

9a. PROJECT OR GRANT NO. 2KL12	**9b. CONTRACT NO.** W7714-8-0192
10a. ORIGINATOR'S DOCUMENT NUMBER 1600-155-017	**10b. OTHER DOCUMENT NOS.** DREO CR 2001-125

11. DOCUMENT AVAILABILITY (any limitations on further dissemination of the document, other than those imposed by security classification)

(X) Unlimited distribution
( ) Distribution limited to defence departments and defence contractors, further distribution only as approved
( ) Distribution limited to defence departments and Canadian defence contractors, further distribution only as approved
( ) Distribution limited to government departments and agencies, further distribution only as approved
( ) Distribution limited to defence departments, further distribution only as approved
( ) Other (please specify)

12. DOCUMENT ANNOUNCEMENT

UNLIMITED

13. ABSTRACT

(U) THE TACTICAL SITUATION ANALYST (TSA) STATION WAS DEVELOPED AT THE DEFENCE RESEARCH ESTABLISHMENT OTTAWA (DREO) TO ANALYZE DATA RECEIVED FROM ANALYST STATIONS AND PUBLISH IT TO THE ALL SOURCE INTELLIGENCE PRODUCTION PROTOTYPR (ASIP). IT WAS BUILT TO WORK WITH THE ELECTRONIC WARFARE SENSOR ANALYST (EWSA) STATION AND THE INTELLIGENCE ELECTRONIC WARFARE (IEW) BATTLEFIELD SIMULATOR

14. KEYWORDS, DESCRIPTORS or IDENTIFIERS

ALEWAT
ASIP
EW
IEW Simulator
LIEWA
SIGINT
COMINT
User's Guide