Rutgers TREC-6 Interactive Track Report (Rich Format Results)

1. Experimental Conditions

1.1 Task Description

We followed the Interactive Track Task Description precisely.

1.2 Conduct of the Experiment

We followed the experimental guidelines precisely, adding to them videotaping, thinking aloud, and a post-experiment questionnaire. We did not log the control system searches, and thus submit only unofficial results.

2. Training

2.1 Description of training process.

Searchers were seated at the computer on which they would be searching, given a loose-leaf notebook with a printed tutorial for the first system they would be searching (ruinq1, ruinq2, ZPRISE), and were instructed to follow the tutorial completely, by interacting with the system according to the directions in the tutorial. The entire tutorial for both ruinq1 and ruinq2 was based around a search on the topic of "documents identifying alternative sources of energy for automobiles," one of the TREC-5 routing topics.The tutorial was concerned with the mechanics of the interface, with using the features of ruinq1 or ruinq2 for constructing and submitting queries, especially using the relevance feedback features.

2.2 Time for training

The training time is calculated in seconds.

ruinq1:

MEAN: 1612.25 MIN: 1450 MAX: 1825

ruinq2:

MEAN: 1593.5 MIN: 1389 MAX: 1822

3. Search Process

3.1. **Clock time** (i.e. real, elapsed time) per search, from the time the searcher was given the topic, until the searcher exited the system given in minutes. Note that searchers were instructed that they had 20 minutes in which to do the search.

ruinq1:

MEAN: 1096.25 MIN: 575 MAX: 1315

ruinq1:

MEAN: 1192.08 MIN: 899 MAX:1323

3.2 **Number of documents "viewed" during a search.** We have two categories of "viewing": **all titles**, defined as the total number of document titles displayed during the

search; and**, Text**, defined as the number of documents whose text the user displayed during the search.

Viewing Behavior

ruinq1:

Viewing Type	Mean	Range
All Titles	378.08	
Text	25.17	

Viewing Behavior

ruinq2:

Viewing Type	Mean	Range
All Titles	205.25	
Text	52.17	

3.3. Number of iterations per search. An iteration is all that occurs between one invocation of "Run Query" and the next, with the first iteration beginning when the searcher "Exits" the system. Note that this number corresponds to the number of queries submitted to the system, plus one (for the last iteration, ending with Exit).

ruinq1:
MEAN: 8.92

ruinq2:
MEAN: 5.17

3.4. Use of relevance feedback

ruinq1:
a. Mean number of documents marked relevant per search: 4.25
b.Mean number of suggested positive terms selected, per search**:** 7.42

ruinq2:
a. Mean number of documents marked relevant, per search: 5
b. Mean number of suggested positive terms selected, per search: 11.08
c. Mean number of documents marked non-relevant, per search: 1.92
d. Mean number of suggested negative terms selected, per search: 4

3.5. Number of documents saved per search

ruinq1: MEAN: 6.25

ruinq2: MEAN: 8.33

4. Transcript for Topic 326i (Searcher 003)

What follows is the log of the interaction for topic 326i, searcher 003. Given are the elapsed time, a description of the searcher's actions, system responses, and extracts from the searcher's verbal protocol (enclosed in quotation marks). The first paragraph of full text is shown for each document that the searcher selected.

00:00 USER: Start search; reads topic description.

00:17 USER: "OK, I'm going to type in a Query and since it's about ferries sinking this is what I'm going to do. And I have to identify the ferry's name and place and where it occurred. I don't know quite how to do this in the search or in the Query so I'm going to have to mark it relevant or not relevant later on."

01:04 SYS: Submitted Query: ferry sinks 100 people dead
0 positive marked documents, 0 positive feedback terms, 0 negative marked documents, 0 negative feedback terms
Result of Query Evaluation: 150 documents retrieved
Summary display

01:18 USER: "OK, this looks fairly relevant so I'm just going to see what it is."

01:20 SYS: Display Full Text of Document ranked 1: FT944-15661
More than 100 people were feared drowned in the second Bangladesh ferry disaster in two months. The ferry, carrying a wedding party, went down in high seas in the Bay of Bengal.

01:19 USER: "This is more than 100 people -- they may have drowned in Bangladesh, but it doesn't give the name of the ferry, so I can't use this. I might mark it relevant later on just because it's a ferry and it has more than 100 people that are dead, etc."

01:50 SYS: Display Full Text of Document ranked 2: FT931-8485
A ferry packed with Haitians bringing food and animals to sell in the markets of the capital sank in a storm and hundreds of people were feared dead, officials and witnesses said yesterday, Reuter reports from Port-au-Prince.

02:03 USER: "So I'll save that one just in case. This is obviously more than 100 people dead. This one actually gives the name of the ferry and it gives the place, so this is a good one. So I'm going to mark it relevant and see what else it has."

02:04 USER: Mark as Save document ranked 1 with document ID FT944-15661
Mark as Save document ranked 2 with document ID FT931-8485
Mark as Positive Relevant document ranked 2 with document ID FT931-8485

02:33 SYS: Update positive feedback term list: au haiti princ port boat anim crowd agricultur fear bring

02:34 USER: Add positive feedback term: boat
"Boat, I'll add this to the query next."
Mark as Save document ranked 2 with document ID FT931-8485
Unmark as Save document ranked 1 with document ID FT944-15661

02:57 USER: “I decided to unsave this because it doesn’t give the name of the ferry, but I may come back to it later on. This one doesn’t say what the ferry is called again.”

03:07 USER: Display Full Text of Document ranked 3: FT944-5773
A ferry carrying 488 people collided with a cargo ship and sank off Manila. At least 275 people were rescued and ships were still picking up survivors early today.

03:07 USER: “OK, here’s one. Now, this one doesn’t say what the ferry was called again. Um.”

03:32 SYS: Display Full Text of Document ranked 4: FT943-543
Officials from Sweden, Finland and Estonia yesterday began investigating the cause of Europe's worst maritime disaster since the second world war amid reports that water flooding in through the bow doors caused the ferry Estonia to capsize.
Scroll Full Text of Document, lines 34ff now visible

03:51 USER: “This is a ship with all the people dead. OK, this looks relevant because where it’s saying the name of the ferry about 100 people died. We’ll mark this relevant. This is saved.”

04:06 USER: Mark as Positive Relevant document ranked 4 with document ID FT943-543

SYS: Update positive feedback term list: estonia capsiz bow estonian tallinn ship baltic vessel door deck water disast port sweden caus

04:15 USER: Mark as Save document ranked 4 with document ID FT943-543
Add positive feedback term: disast

04:21 USER: Display Full Text of Document ranked 5: FT934-15680
Fears for Korean ferry: More than 170 people were feared dead after a ferry carrying holiday-makers, anglers and islanders capsized and sank off the west coast of South Korea.

04:27 USER: “OK, this is again 100 people, it doesn’t give the name of ferry. This is the one we just had. Same one. More aspects of the first one. They don’t want us to save like ... to expand.”

04:35 USER: Display Full Text of Document ranked 6: FT943-312
Sweden's government disclosed yesterday that six recent 'near accidents' in its waters involving roll-on roll-off ferries had come to light since the sinking of the Estonia on Wednesday with the loss of up to 900 lives. Details of the incidents emerged as Finland and Sweden ordered widespread inspections of ferries for bow door weaknesses following the sinking in the Baltic Sea - the worst maritime disaster in European waters since the second world war.

04:42 USER: “And this is the one that just has.”

04:47 USER: Display Full Text of Document ranked 7: FT944-18875
Somehow, it has happened again. Seven years after the British vehicle ferry Herald of Free Enterprise capsized off Zeebrugge with the loss of 193 lives, the Estonia disaster has focused world attention on a question that shipowners hoped had gone away: are roll-on, roll-off ships like these inherently unsafe?

04:52 USER: “Same one.”

04:55 USER: Display Full Text of Document ranked 8: AP880422-0077
The U.S. dollar rose today in Tokyo finishing the
week higher against the Japanese yen, while stock prices were
little changed.

05:46 USER: Scroll List of Titles of Retrieved Documents

06:23 USER: “Actually, let’s do some negative.

06:28 USER: Display Full Text of Document ranked 28: FT933-15867
STENA Sealink Line, the Swedish-owned UK ferry operator, is to put the
world's largest high-speed ferry into service in 1995 on its Irish Sea route
between Holyhead and Dun Laoghaire, Richard Tomkins writes. Parent company
Stena has ordered two of the vessels from Finnyards in Rauma, Finland, at a
cost of about Pounds 130m. The second vessel, to be delivered in 1996, will
be available for charter.

06:39 USER: Mark as Negative Relevant document ranked 28 with document ID FT933-15867

06:41 SYS: Update negative feedback term list: stena vessel sealink speed metr passeng route 130m
advantag abl

06:48 USER: “I don’t really like any of these negative terms.”

06:51 USER: Submitted Query: ferry sinks 100 people dead
0 positive marked documents, 2 positive feedback terms (boat disast), 0 negative marked
documents, 0 negative feedback terms
Result of Query Evaluation: 150 documents retrieved
Summary display

07:06 USER: Display Full Text of Document ranked 1: FT944-15661
More than 100 people were feared drowned in the second Bangladesh ferry
disaster in two months. The ferry, carrying a wedding party, went down in
high seas in the Bay of Bengal.

USER: Mark as Positive Relevant document ranked 1 with document ID FT944-15661

SYS: Update positive feedback term list: estonia capsiz bow estonian tallinn ship baltic vessel door
deck water au bangladesh sank port sweden sea caus fear

07:09 USER: Mark as Save document ranked 1 with document ID FT944-15661

07:19 USER: Display Full Text of Document ranked 4: FT943-312
Sweden's government disclosed yesterday that six recent 'near accidents' in
its waters involving roll-on roll-off ferries had come to light since the
sinking of the Estonia on Wednesday with the loss of up to 900 lives.
Details of the incidents emerged as Finland and Sweden ordered widespread
inspections of ferries for bow door weaknesses following the sinking in the
Baltic Sea - the worst maritime disaster in European waters since the second
world war.

07:30 USER: “I’m wondering if it’s the same one.”

07:44 USER: Scroll Full Text of Document, lines 41ff now visible

07:57 USER: Display Full Text of Document ranked 10: FT943-535
News of the Estonia ferry disaster yesterday instilled a deep sense of shock across Sweden, a country unaccustomed to such a jolting catastrophe. 'Nothing like this has ever happened to us before,' said a journalist on a leading newspaper. 'We have not been involved in the great wars of this century, we have not suffered from natural disasters. We have not even lost one of our soldiers in the Bosnian peacekeeping operation. It will take a long time for the country to get over this.'

07:58 USER: "Let's see what this is. Oh, it's the same one."

08:00 USER: Scroll Summary display

08:15 USER: Display Full Text of Document ranked 14: FT944-5773
A ferry carrying 488 people collided with a cargo ship and sank off Manila. At least 275 people were rescued and ships were still picking up survivors early today.

08:24 USER: Mark as Positive Relevant document ranked 14 with document ID FT944-5773

SYS: Update positive feedback term list: estonia capsiz ship bow estonian tallinn baltic vessel door sank deck water au bangladesh port survivor sweden rescu cargo sea caus brief carr fear

08:26 USER: Mark as Save document ranked 14 with document ID FT944-5773

08:36 USER: Display Full Text of Document ranked 17: FT931-15025
THE POLISH ferry which capsized in a fierce storm off Germany's Baltic coast yesterday - with the loss of 54 of the 63 people on board - had capsized on two previous occasions, Reuter reports from Stralsund, Germany.

08:49 USER: "I think this is a new one. But it doesn't have enough people who died, although I'll still mark it relevant."

09:10 USER: Mark as Positive Relevant document ranked 17 with document ID FT931-15025

SYS: Update positive feedback term list: capsiz estonia ship bow estonian baltic vessel door sank deck survivor port sail crew sweden herald water polish sea storm truck caus live jan

09:41 USER: Scroll Summary display

09:51 USER: Display Full Text of Document ranked 25: FT923-8101
The sewerage system on the Celtic Pride ferry boat was blamed by Irish Marine Department officials for the deaths of Kathleen Tomlins, aged 15, and her brother James, aged 12, in their cabin during a crossing from Swansea to Cork.

10:05 USER: Scroll Summary display

10:12 USER: "I don't think we're going to go any farther than this because anything after 40 is ranked a bit low for this type of a search."

10:25 USER: Display Full Text of Document ranked 37: FT941-9683
About 200 Burmese, many of them women and children, were feared dead after a boat taking them home capsized off the southern Thai province of Ranong.

10:39 USER: Display Full Text of Document ranked 34: FT933-7128
Thames Fast Ferries, which operates between London and Gravesend, Kent, yesterday sought talks with Robson Rhodes, liquidator of the capital's collapsed RiverBus company, in the hope of restoring the service. The RiverBus boats remain tied up at Trinity Pier, east London, as Robson Rhodes seeks a buyer for the business.

10:55 USER: "I think we're going to take off now because it might not be the same thing. Query again."

10:56 USER: Remove term from Positive Feedback Term list (boat)

11:03 USER: Scroll Summary display

11:04 USER: "Oops, I clicked too far."
Scroll Summary display
"I'll run the query."

11:12 SYS: Submitted Query: ferry sinks 100 people dead and
5 positive marked documents, 1 positive feedback term (disast), 1 negative marked document, 0 negative feedback terms
Result of Query Evaluation: 150 documents retrieved
Summary display

11:41 USER: Display Full Text of Document ranked 5: FT943-316
Sweden's senior maritime safety officer yesterday questioned the safety of roll-on roll-off ferries with opening bow sections and said he was considering restricting their operations following the sinking of the ferry Estonia in the Baltic Sea with the loss of as many as 900 lives.

11:48 USER: "I already have that."

11:42 USER: Mark as Negative Relevant document ranked 14 with document ID FT943-316

SYS: Update negative feedback term list: estonia bow stena maritim ship safet section vessel sea disast passeng water roll finland swedish

USER: Add term to Negative Relevant Feedback List (estonia)

11:53 SYS: Submitted Query: ferry sinks 100 people dead and
5 positive marked documents, 1 positive feedback term (disast), 2 negative marked documents, 1 negative feedback term (estonia)
Result of Query Evaluation: 150 documents retrieved
Summary display

12:06 USER: Scroll Summary display

12:20 USER: Add term to Positive Relevant Feedback List (live)

12:22 USER: Add term to Positive Relevant Feedback List (sank)

12:29 USER: Add term to Positive Relevant Feedback List (port)

12:42 USER: “Survivor is a negative.”

12:42 USER: Add term to Positive Relevant Feedback List (survivor)

12:45 USER: Add term to Negative Relevant Feedback List (swedish)

12:47 USER: Add term to Negative Relevant Feedback List (finland)

12:57 SYS: Submitted Query: ferry sinks 100 people dead and
5 positive marked documents, 5 positive feedback terms (disast live sank port survivor), 2 negative marked documents, 3 negative feedback terms (estonia swedish finland)
Result of Query Evaluation: 150 documents retrieved
Summary display

13:31 USER: Scroll Summary display

13:37 USER: Display Full Text of Document ranked 12: FT944-10102
European Union transport ministers are to ask the Commission to draw up tighter inspection procedures for roll-on roll-off passenger ferries operating from European ports. Ferry operators would also be required to count and record information about the identity of passengers.

13:51 USER: “This is about the old one we just found.”

14:08 USER: Scroll Summary display

14:11 USER: Display Full Text of Document ranked 21: FT921-924
SURVIVORS and relatives of the 158 people who died in the fire on the Scandinavian Star ferry in 1990 say they will sue Lloyd's Register of Shipping which, they say, last checked the vessel's safety.

14:15 USER: “This looks like a new one.”

14:20 USER: Mark as Positive Relevant document ranked 21 with document ID FT921-924

SYS: Update positive feedback term list: capsiz estonia ship bow estonian baltic vessel door deck sail crew sweden herald water sea storm truck caus safet jan

14:29 USER: Display Full Text of Document ranked 23: FT944-15406
The bow door of the Baltic ferry Estonia, which sank last month with the loss of 900 lives, was located over a mile from the wreck.

14:33 USER: Display Full Text of Document ranked 24: FT944-18217
A check on the bow doors of all roll-on, roll-off passenger ferries operating out of UK ports has been ordered by the Department of Transport in the wake of last week's sinking of the Estonia in the Baltic.

14:41 USER: Display Full Text of Document ranked 26: FT921-5160
A woman, whose husband is still missing, screams Distraught relatives gathered yesterday outside the Incirharmani mine near Kozlu, north-western Turkey, where around 300 are feared dead in the country's worst pit disaster. So far 95 bodies have been recovered with a further 200 missing.

14:52 USER: Display Full Text of Document ranked 27: FT943-3240
Accident investigators will today widen their inquiries into the collapse of a passenger walkway which killed six people and injured seven others boarding a ferry at the Kent port of Ramsgate.

15:03 USER: Scroll Summary display

15:08 USER: Display Full Text of Document ranked 31: FT934-16534
PORTSMOUTH'S successful municipal ferry port could be in jeopardy if the government refuses its request to borrow Pounds 7m for expansion.
The port needs to reclaim land, improve parking, port handling facilities and increase berths for the new super-ferries, if business is not to be lost to the trust port of Poole, Southampton and the Channel tunnel.

15:25 USER: Scroll Summary display

15:36 USER: Display Full Text of Document ranked 41: FT942-12305
Rescuers recovered 44 bodies after a ferry carrying rush-hour commuters capsized near the Kenyan port of Mombasa. State-run Kenya Broadcasting Corporation said up to 300 people were feared drowned.

15:45 USER: Mark as Save document ranked 41 with document ID FT942-12305
Mark as Positive Relevant document ranked 41 with document ID FT942-12305

SYS: Update negative feedback term list: capsiz estonia ship bow estonian baltic vessel door crew sweden herald water sea caus safet recov bodi brief carr fear

16:02 USER: Display Full Text of Document ranked 44: FT921-2935
RESCUE teams said yesterday that there was little hope of finding more survivors from a powerful earthquake which hit eastern Turkey, Reuter reports from Erzincan, Turkey.

16:15 USER: Display Full Text of Document ranked 48: FT944-5084
Maritime representatives of more than 80 nations yesterday gave unanimous backing to proposals for the establishment of a special international panel to look at issues of roll-on roll-off passenger ferry safety. The panel, established at the suggestion of Mr William O'Neil, secretary general of the London-based International Maritime Organisation, will hold its first meeting on Saturday.

16:24 USER: Display Full Text of Document ranked 50: FT924-13779
THE DEATH toll in the Cairo earthquake rose yesterday to an estimated 450 people, with some 4,000 injured.
Casualty figures may range higher as the search for survivors continues in collapsed buildings, many of them crumbling tenements, in poorer areas of the city of 12m.

16:30 SYS: Submitted Query: ferry sinks 100 people dead and
7 positive marked documents, 5 positive feedback terms (disast live sank port survivor), 2 negative marked documents, 3 negative feedback terms (estonia swedish finland)
Result of Query Evaluation: 150 documents retrieved
Summary display

16:39 USER: Scroll Summary display

16:49 USER: “These are pretty much the same articles.”

17:01 USER: Display Full Text of Document ranked 19: FT934-1954
On an April night in 1991, an Italian car ferry, the Moby Prince, ran into an oil tanker outside the port of Livorno and 140 people died in the blaze. It was Italy's worst maritime disaster since the second world war. The crew of the tanker, the Agip Abruzzo, survived. But the radio messages sent by Moby Prince went unheeded, both by other ships in the vicinity of Livorno - the accident occurred 2.5 miles out to sea - and on land.

17:09 USER: “I don’t think we have this.”

17:12 USER: Mark as Positive Relevant document ranked 19 with document ID FT934-1954

SYS: Update negative feedback term list: capsiz ship vessel estonia sea maritim safet crew bow bridg cargo baltic herald princ door water investig die enterpris bodi

USER: Mark as Save document ranked 19 with document ID FT934-1954

17:16 USER: Add term to Positive Relevant Feedback List (die)

17:19 USER: Add term to Positive Relevant Feedback List (bodi)

17:24 USER: Scroll Summary display

17:35 SYS: Submitted Query: ferry sinks 100 people dead and
7 positive marked documents, 7 positive feedback terms (disast live sank port survivor die bodi),
2 negative marked documents, 3 negative feedback terms (estonia swedish finland)
Result of Query Evaluation: 150 documents retrieved
Summary display

17:50 USER: Scroll Summary display

18:02 USER: Display Full Text of Document ranked 20: FT921-12478
Relatives and survivors of the 1988 Piper Alpha oil platform disaster, in which 167 people died, have given up efforts to prosecute Occidental, owner of the installation, for culpable homicide.

18:10 USER: Scroll Summary display

18:16 USER: Display Full Text of Document ranked 24: FT944-5248
Two shipping disasters in the past week have lent fresh urgency to a safety review which starts today at the London-based International Maritime Organisation.

18:31 USER: Display Full Text of Document ranked 27: FT943-3295
Workmen at Ramsgate port in Kent look down on the section of ferry walkway which collapsed in the early hours of yesterday morning, catapulting six people to their deaths and injuring seven others.

20:00 USER: Stop search