ESL A Subsidiary of TRW



FBIS

TRAINING PLAN APPENDIX A: BASIS OF ESTIMATE

In Response to Contract No. 84X-927700-000 (R.O.M.)

1 October 1984

495 Java Drive • P.O. Box 3510 • Sunnyvale, CA 94088-3510 • 408.738.2888

Copy No. 2

FBIS

TRAINING PLAN

R.O.M.

APPENDIX A: BASIS OF ESTIMATE

l October 1984

This data shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed in whole or in part for any other purpose other than to evaluate the data; provided that if a contract is awarded to the offeror as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the contract. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction is contained in sheets A-1 through A-13.

Prepared by:
Philip P. Dotson
Fred J. Krazeise
Integrated Logistics Support
Strategic Systems Division
ESL
A Subsidiary of TRW
495 Java Drive
Post Office Box 3510
Sunnyvale, CA 94088-3510

10.0 APPENDIX A: BASIS OF ESTIMATE

10.1 PRESENTATIONS, PERFORMANCE AND DELIVERABLES

ESL will provide the following training services as part of this project.

10.1.1 COURSE OUTLINES

Copies of the course outlines, required training equipment and training schedules will be developed and presented as part of the PDR for draft/outline versions and preliminary version including lesson plans as part of CDR. Finals will be presented after training validation.

10.1.2 BUREAU TRAINING

The following courses will be provided. The presentations will be at the FBIS field sites. Durations are for each presentation.

16 presentations of each of the following courses:

Operator course 2 weeks
Editor course 1 day
Supervisor course 1 day
System manager course 1 day
Admin overview (1/2 day) 1 day

3 presentations of the maintenance course

3 weeks

Maintenance and operation course validations

4 days

10.1.3 HEADQUARTERS TRAINING

The following courses will be presented:

System users overview presented twice

1/2 day

Admin overview

presented twice

1/2 day

Data base user's course presented twice

1 week

Data base system manager course

l day

10.1.4 TRAINING MATERIAL

Instructor guides, student guides, PE workbooks for each course will be designed, developed, and produced.

Two copies of each instructor guide will be left at each site.

A student guide and PE workbook will be given to each student.

Additional copies will be left at each site for on-going training.

The master copies of each of the above along with review copies will be delivered to the customer.

The anticipated numbers of copies are shown under the costing section.

10.1.5 VIDEO TAPE TRAINING.

Copies of each module will be sent to each site and to the headquarters.

Copies of the maintenance TOI tapes will also be sent to each site and to the headquarters.

The master copies of each of the above tapes will be deliverable to the customer.

10.1.6 CERTIFICATES OF COMPLETION

Certificates of completion will be provided for each student.

10.2 ESTIMATES

10.2.1 PREPARATION

The estimates in the subordinate paragraphs detail the effort required to design and develop the training and materials for this project.

10.2.1.1 Video tape modules

The costs involved to design and develop the five media modules including a treatment, script, story boards, shooting, narration, editing and mastering are listed below. These costs are based on National Television Standards Code (NTSC) standard video, and the modules all being unclassified.

Terminal use, Computer basics (two modules	;)
System overview	
FBIS upgrade overview	

STAT

STAT

SIAI

STAT

ESL development, support, review and management of the project would require 3 man months.

10.2.1.2 Maintenance Transfer of Information (TOI)

The costs to prepare the maintenance Transfer of Information (TOI) tapes would require the following support. Since the actual taping would be done during a normal class, no extra time is required. However, an additional 20% maintenance class preparation is required for the instructors; tape to record the presentations; and approximately 20% additional costs for special graphic treatments of block diagrams and maintenance diagrams. Post production to select and edit the tapes produced during the presentations would also be required.

Additional prep hours
20% of Maintenance prep
20% of Graphic prep
20% of Graphic costs for
maintenance Student Guide 2 man weeks

Tape (Mastering)

Post production
40 hours editing facility costs.

STAT

STAT

10.2.1.3 Training Needs Analysis (TNA)

ESL proposes to conduct a Training Needs Analysis (TNA). The man hours to conduct the TNA along with the validation and revision of training materials are as follows:

I man month internal support.

Operator tasks
6 man weeks
Maintainer tasks
8 man weeks
System Manager/System Supervisor/Editor tasks
4 man weeks
Hq staff
6 man weeks
Revision of materials based upon TNA verification
6 man weeks

10.2.1.4 Preparation of Instructional Materials

ESL will prepare Course Outlines, Instructor Guides, Student Guides, and Practical Exercise Workbooks based upon the following level of effort:

Draft/Outline - 25% of total effort Preliminary - 60% of total effort Final - 15% of total effort

A draft/outline copy of all training materials will be submitted to the customer for comments prior to development of training materials. Preliminary course materials will be validated during the pilot training which will be conducted at the test-bed and alpha sites. Required revisions will then be made and final copies will be submitted to the customer. Development hours are based on a historical figure of 6.6 hours per page, with approximately 56% of the effort from the material developer. The remaining effort is support time.

10.2.1.5 <u>Instructor Guides</u>

ESL will prepare instructor guides for the following courses:

Course	Pages	Written/Man hours
operator course (Bureau)	50	pages/330 hours
Editor Course (Bureau)	10	pages/66 hours
System Manager Course (Bureau)	40	pages/264 hours
Maintenance Course (Bureau)		pages/1320 hours
Manager/Administrative	200	pages/1320 nours
Overview Course (Bureau)	25	D2000/165 have-
Supervisor Course (Bureau)		pages/165 hours
System Operations Overview	10	pages/66 hours
for User/Analyst (Hqs)	25	22.00 /1 (E. hause
Operation and Use of Data Base	25	pages/165 hours
Course (Hgs)		2200 /264 have
Data Base Maintenance Course	40	pages/264 hours
for System Manager (Hqs)	25	2000 /165 1
System Overview for Manager/	25	pages/165 hours
Administrator Course (Hqs)	25	Dans / 1 CF 1
mametabaratar course (ngs)	Z 3	pages/165 hours
Developer hours at 56% of	TOT	al 2970 hours
peveroper nours at 50% (or tot	al 1663 hours

10.2.1.6 Student Guides

ESL will prepare student guides for the following courses:

Course	Pages written/Man hours
Operator Course (Bureau)	125 pages/825 hours
Editor Course (Bureau)	10 pages/66 hours
System Manager Course (Burea	u) 40 pages/264 hours
Maintenance Course (Bureau)	200 pages/1320 hours
Manager/Administrative	,
Overview (Bureau)	25 pages/165 hours
Supervisor Course (Bureau)	10 pages/66 hours
System Overview for	
User/Analyst (Hqs)	25 pages/165 hours
Operation and Use of	
Data Base Course (Hgs)	25 pages/165 hours
Data Base Maintenance Course	
for System Manager (Hqs)	25 pages/165 hours
System Overview for Manager/	
Administrator Course (Hqs)	25 pages/165 hours
- •	Total 3366 hours
Developer hours at 569	% of total 1884 hours

10.2.1.7 Practical Exercise Workbooks

ESL will prepare practical exercise workbooks* for the following courses:

Course	Pages Written/Man hours
Operator Course (Bureau)	125 pages/1031 hours
Editor Course (Bureau)	25 pages/206 hours
Maintenance Course (Bureau)	150 pages/1238 hours
Supervisor Course (Bureau) Operation and Use of	25 pages/206 hours
Data Base Course (Hqs)	60 pages/500 hours
	Total 3181 hours
Developer hours at 56	% of total 1781 hours

^{*} The Practical Exercise Workbook development will require an additional 25% (6.6 hrs/pg + .25% = 8.25 hrs/pg) effort. This additional effort is required to implement the self-paced exercises.

10.2.1.8 Course outlines

ESL will prepare course outlines for the following courses:

Course	Pages	Written/N	Man hours
Operator Course (Bureau)		pages/66	
Editor Course (Bureau)	5	pages/33	hours
System Manager Course (Bureau)	5	pages/33	hours
Maintenance Course (Bureau)	10	pages/66	hours
Manager/Administrative			
Overview (Bureau)	5	pages/33	hours
Supervisor Course (Bureau)	5	pages/33	hours
System Overview for			
User/Analyst (Hqs)	5	pages/33	hours
Operation and Use of			
Data Base Course (Hqs)	10	pages/66	hours
Data Base Maintenance Course		- -	
for System Manager (Hqs)	5	pages/33	hours
System Overview for Manager/			
Administrator Course (Hqs)	5	pages/33	hours
·		al 429	
Developer hours at 56%	of tot	al 240	hours

10.2.1.9 <u>Instructor Preparation</u>

Total man-hours for instructor preparation are estimated as follows:

```
Maintenance Courses
    2 Course Developers/Trainers - 2 man weeks
    2 Trainers
                                 - 6 man weeks
    Total
                                 - 8 man weeks
· Operations Courses
    2 Course Developers/Trainers - 2 man weeks
                                 - 6 man weeks
    2 Trainers
    Total
                                 - 8 man weeks
 Hq Training
    Course Developers/Trainers - 2 man weeks
    2 Trainers
                                 - 6 man weeks
    Total
                                 - 8 man weeks
    Total preparation time - 24 man weeks
```

10.2.2 DELIVERABLES

10.2.2.1 <u>Video Tape Modules</u>

The following will be deliverable:

5 modules 20 copies each

STAT

10.2.2.2 Maintenance TOI

The following will be deliverable.

20 modules/tapes up to 1 hour long 20 copies each

STAT

10.2.2.3 <u>Instructor Guides</u>

ESL will provide instructor guides for the following courses:

Operator Course (Bureau) Editor Course (Bureau) System Manager Course (Bureau) Maintenance Course (Bureau) Manager/Administrative	50 50	copies copies copies copies	@ @ @	10 4 0	pages pages pages pages
Overview Course (Bureau) Supervisor Course (Bureau) System Operations Overview		copies copies	@ @		pages pages
for User/Analyst (Hqs) Operation and Use of Data Base	10	copies	@	25	pages
Course (Hqs) Data Base MaintenanceCourse	10	copies	@	40	pages
for System Manager (Hqs) System Overview for Manager/	10	copies	@	25	pages
Administrator Course (Hqs)	10	copies	@	25	pages

10.2.2.4 Student Guides

ESL will provide student guides for the following courses:

Operator Course (Bureau) Editor Course (Bureau) System Manager Course (Bureau) Maintenance Course (Bureau) Manager/Administrative	100 50	copies copies copies	@ @	10 40	pages pages pages pages
Overview (Bureau)		copies	@	25	pages
Supervisor Course (Bureau) System Overview for	100	copies	@	10	pages
User/Analyst (Hqs)	350	copies	6	25	กลดอธ
Operation and Use of		· · · · · ·	·		pages
Data Base Course (Hqs)	350	copies	@	25	pages
Data Base Maintenance Course			_		
for System Manager (Hqs)	25	copies	6	25	pages
System Overview for Manager/ Administrator Course (Hqs)	350	copies	@	25	pages

10.2.2.5 Practical Exercise Workbooks

ESL will provide practical exercise workbooks for the following courses:

Operator Course (Bureau)	350 copies	6	125	pages
Editor Course (Bureau)	100 copies			
Maintenance Course (Bureau)	100 copies			
Supervisor Course (Bureau)	100 copies			
Operation and Use of	_		^	
Data Base Course (Hqs)	350 copies	e	60	pages

10.2.2.6 Course outlines

ESL will provide course outlines for the following courses:

Operator Course (Bureau) Editor Course (Bureau) System Manager Course (Bureau) Maintenance Course (Bureau) Manager/Administrative	1	copy copy copy	@ @ @	5 5	pages pages pages pages
Overview (Bureau) Supervisor Course (Bureau)		copy	@		pages
System Overview for	7	сору	9	5	pages
User/Analyst (Hqs)	1	сору	@	5	pages
Operation and Use of	_		_		
Data Base Course (Hqs) Data Base Maintenance Course	1	copy	6	10	pages
for System Manager (Hqs) System Overview for Manager/	1	сору	@	5	pages
Administrator Course (Hqs)	1	сору	@	5	pages

10.2.3 PRESENTATIONS

10.2.3.1 Bureaus

10.2.3.1.1	OPERATIONS TRAINING				
	Operations Course	3	wee	ks	
	Presentations	16			
	4 presentations				
	@ 3 Instructor/				
	Facilitators	36	man	weeks	
•	2 presentations				
	· @ 4 Instructor/				
	Facilitators	24	man	weeks	
	10 presentations				
	@ 2 Instructor/				
	Facilitators	60	man	weeks	
	Total			120 man	weeks

MAINTENANCE TRAINING Maintenance Course Presentations 1 presentation 6 3 Instructor/ Facilitators 2 presentations 6 4 Instructor/ Facilitators 24 man weeks Total 3 weeks 2 weeks 3 weeks 2 man weeks 2 man weeks 3 man weeks 3 man weeks

10.2.3.2 Validation

Operations/Maintenance					
Course Validation	l we	ek			
Instructors/					
Facilitators	3				
Total	-		3	man	weeks

10.2.3.3 <u>Headquarters Training</u>

```
Overview, system and
Data Base Courses 3 weeks
Presentation 1
Total 3 weeks
Instructors/
Facilitators 3
Total 9 man weeks
```



10.2.5 SUMMARY MAN-LOADING CHART.

The following chart represents the level of effort over the proposed length of the project with respect to the design, development and implementation of the training program. All times are given reference to Receipt of Order (RO).

