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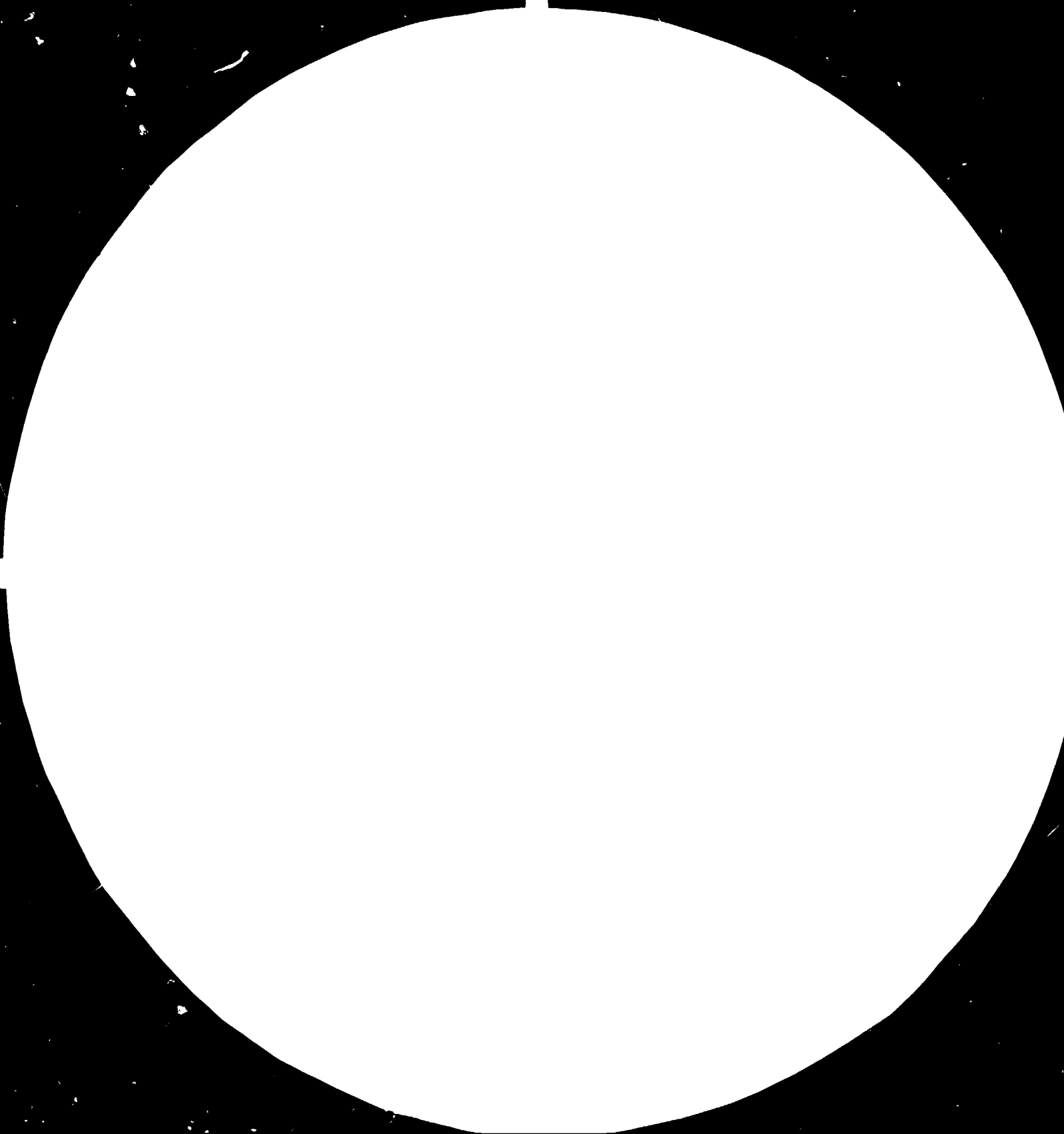
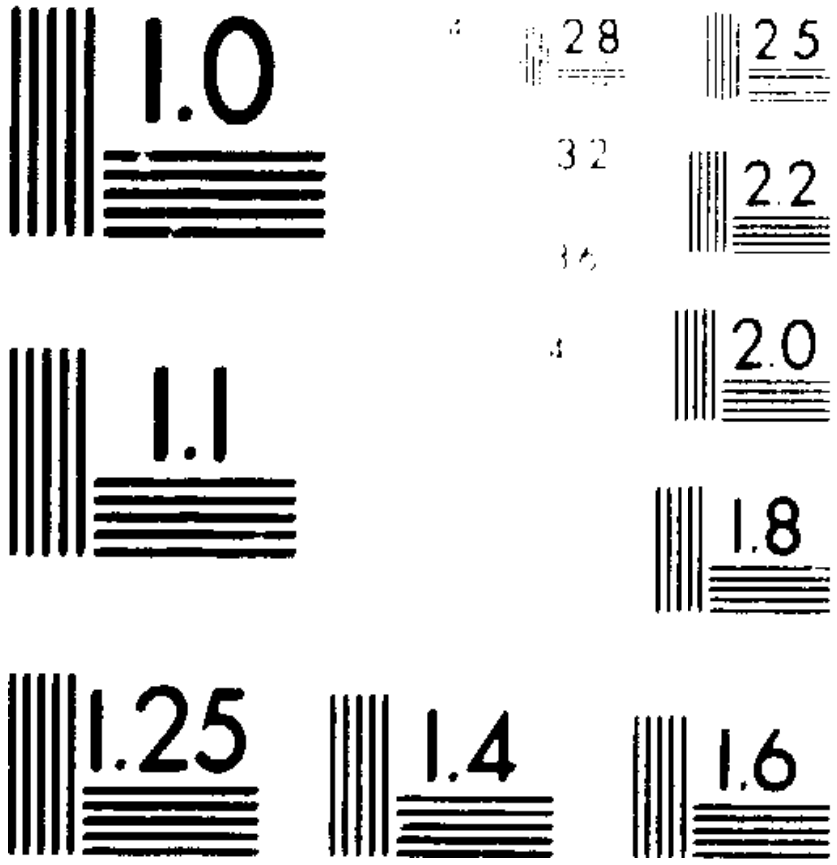




14231

Kristianstad, Sweden
September 1984

India.

DEVELOPMENT OF VIDEO SOFTWARE AT SIET INSTITUTE IN HYDERABAD, INDIA.

RP/IND/83/002/11-02/31.5.A

Final Report

by

Bengt Högberg, Training
Advisor in the development
of video software.

CONTENT

SUPPLEMENTAIRES

Sketch view over the new television lab.

Equipment list

Written course material

Suggested optionals

VIDFO AND TELEVISION ARE OFTEN THE MOST EFFECTIVE WAY OF INFORMATION

India have a big experience in how to inform and educate via their own satellite, INSAT. And they are not only using the video technique for broadcasting. A project starts, right now, with mass education, through video cassettes, at The Open University of Andhra Pradesh. Students, at 30 different educational centres, watch lectures, distributed on video tapes.

The widely spread illiteracy often makes it impossible to communicate through printed information. And, anyhow, our message often ends up in a pile in order "to be read when I get the time"

Direct transmissions, from the satellite, together with a great number of small sub stations, will reach 70% of the population. The gouvernment have and will, locate receivers in a great number of villages and schools. Usually a big crowd gather in front of these strategically located community tv-sets. But centrally produced programmes, still mean a certain restriction.

They have also realized that they need programmes adjusted to a certain area. And a controlled showing. Complementary explanations are often needed. It is sometimes important to be able to answer questions, directly after the programme. We smile at the following situation, but it is a simple example of how easy it is to miss the target. - After an information programme about malaria, it was found out that some people, in the village, did not take the programme seriously. When the question why, came up, they answered. "We don't have such big mosquitos here. They took up the whole screen"

The Indians experience of spreading information by television is of guidance. Central broadcasting is needed, but also programme production, for and together with the poulation in certain areas. With "guided" programme shows.

POSSIBLE SUITABILITY FOR EXISTING, SIET, COURSE MATERIALS WITHIN VIDEO PRODUCTION

A professional TV-producer has an important part here. As an adviser, to the faculty and, of course, for producing high quality video programmes. The producer shall exhort and encourage the faculty to find good material for this media. The faculty plays the most important role here. If nothing comes from them, the producer has nothing to work with. So, the members of the faculty must, at the same time, be requested to call on the producer.

If one only starts with the programme production work and succeeds well, with the initial programmes, then the need of visualization, of existing course materials, will be very distinguished. And every expert, in the faculty, will understand, quite easily, which parts of his texts, that are the most suitable.

A letter, to all teachers, with a simple explanation of the kind of materials that are suitable to make video programmes of, would be a good start.

For instance in the course material for Bankemployees, in the purpose of improving the understanding of small industries, I found many chapters, which are rather easy to visualize. Such as "Dynamics of rural development" - "Handloom industry" - "Sericulture industry, in India" - "Coir industry, in India" - "Need for appropriate technology in rural industries" - "Co-operativisation of rural industries" - "Assam handicrafts/Sital Pati (Cool mat), a case study" - "Stone polishing units, Tadipatri, a case"

It is not difficult to visualize such areas. You see the pictures, in front of you, already when reading the headings.

CLASSES FOR PERSONNEL AND COURSE MEMBERS

As I mention, in this report, the personnel is relatively well educated, theoretically. During my first period, at SIET, I however, lectured on "Production planning for TV" - "Use of video for instruction" - "Technics of video production"

Mainly for the partisipants in the courses "Industrial extension through radio and TV" and "Audiovisuals in training" But also the personnel at the Communication Department were there.

The possibility to make demonstrations was, unfortunately, very small. The old, black and white, video equipment, could not be used for this purpose and the new one had not yet arrived.

The only demonstration, that I could make, was to play the video programmes, that I had brought along, on a borrowed colour-TV equipment.

This inconvenience was eliminated during my second period. At that time I had a fully professional equipment to work with. But the time was very short.

I enclose the written material wich I gave to the attenders.

THE PERSONNEL AT THE TV-LAB.

At present, there are four persons, working with the technical/ practical part. There are no clear outlines concerning the responsability for the different range of work. My experience is that the management, of the department, is not adequately planned. This results in insecurity and passivity. One does not take any initiative on one's own.

The personnel also have, from time to time, a rather large responsability for the classes and the management of other AV-aids. This means that the job with the video programme production work, is very split. A division of range of work is absolutely necessary.

More training, for the personnel that carry out the real job, would strengthen their position and selfconfidence.

According to my opinion, there are, in the department, two persons, who are the most suitable for this new task. Mr Hari Ram as a producer and Mr Gopinath Reddy as the photographer. They both have that extra interest which is needed, in order to learn a new complicated process. I do not want to comment on personal contribution more than necessary. But I mean that it is very important that we get a good, independent staff. Otherwise the video equipment will be more looked upon as a valuable piece of jewellery, shown to prominent visitors, than a working tool.

Both mentioned gentlemen are welcome to take part of the production, during a certain time, at my company, in Sweden, if necessary economical arrangements concerning the tickets and subsistence can be made.

The producer has to be given the status, which makes it possible, for him, to lead the faculty, professionally, when it comes to judging what is suitable for programme production. He must be very capable to carry out his task. Otherwise, I'm afraid, that the production work will "self die" after a while.

The possibility, for the producer, to command the personnel of the department, should be clearly defined and shown in a plan of booking or working schedule.

Another problem is that nobody, at SIET, can carry out complicated electronical repairs. The equipment will stand still, for long periods, during break downs. And that happens, sooner or later. There is no Sony representative, with professional service, in the state. And it is very uncertain if one can use the knowledge of the Indian television station, in Hyderabad. Therefore, a maintainance engineer must be employed. He can also work as a video and sound engineer, during recording and editing.

Within the present budget, I want to do the following suggestions, concerning the training of the personnel:

1. The SIET personnel, now, does exercises by their own.

2. I return to SIET, for two months, in the end of October, for programme production work and for advices and corrections of eventual misstakes.

3. Alt. a) Mr Hari Ram and Mr Reddy return, together with me, to Sweden, for two months. But January and February are the two coldest months here. So let us give them an alternative.

3. Alt. b) Mr Hari Ram and Mr Reddy, produces video programmes, by themselves, during 4 to 6 months. (Or my third stay at SIET, comes some months later). And after that they shall come to Sweden, in May or June, and be here for two months.

4. All three of us return to India, and I stay for two months.

I will be happy if you let me know, about your decision, as soon as possible.

It is, of course, possible to shorten the training of the personnel and use the money for aditional equipment. But, frankly, that will result in more complicated "mashines" wich the staff knows very little about. I should like to end the initial training first. Then, if possible, it is time to buy the more sofisticated "tools"

THE DEVELOPMENT OF THE TV-LAB.

There was a given space for the new activities. Quite small, but sufficient for SIET's need.

What kind of programmes will be produced at SIET ?
- Visualization of existing course materials.
- Role plays.
- Case studies.
- Behaviour training
- And, perhaps, in the future, programmes, within SIET's area of knowledge, for broadcasting at the Indian television.

Also a certain possibility, for companies and institutions, to hire SIET's television production unit, for presentation programmes or educational programmes, shall be possible. Contacts have already been made with some institutions that are interested. Or rather, interested representatives have come to SIET, as soon as "the bush-telegraph" made known that here is a new professional equipment. For instance, The Open University of Andhra Pradesh.

It was important to make the most of the space. Many versions were rejected before we came to the exixting solution. The studio itself, is a rectangular room, which in one end is furnished as a class room and in the other can have the set that is needed. Two preview rooms, at one long-side, separates the studio from the adjacent office premises of the department. And outside a shorter wall is a control room and a small sound recording room. See enclosed sketch.

The result fulfils, more than enough, the demands that SIET needs to meet. Now remains the responsibility, to use the new facilities in the best possible way. And to complete the last details, which often is not done when it is possible to use it as it is.

THE OLD VIDEO EQUIPMENT

Before SIET got the new colour video equipment, they have used an old black and white two camera unit. It has not been possible to edit the recordings and that has, of course, lead to big restrictions. It has not been possible to make any real programmes. Only long continuous scenes.

The equipment is also working with 220 volts ac, only. Which means that it is very difficult to bring it "out to the field" Especially here where the situation of power supply is insufficient. The villages are sparcely electrified. The voltage fluctuations are big and interruptions are common.

An advantage, however, has been that the equipment is easy to handle. They have used it rather often and it has given the personnel a certain experience.

But, as said, it has not meant an experience with productions outside SIET and not with editing.

THE NEW VIDEO EQUIPMENT

SIET's new video equipment is almost the same as the Indian television, Doordarshan, uses. It gives the possibility to produce fully professional television programmes.

Most of it comes from Sony, in Japan, and consists from a general point of view, of:

- Two mobile recording units, equipped with colour camera, portable videorecorder and light set. 2 - 3 persons are needed to handle the equipment.
- The same cameras can be connected to the camera control unit, which we build in SIET's new studio. A Special Effects Generator, makes it possible to do a great deal of the picture treatment of the modern TV-production. Operating crew, 2 - 5 men.
- The editing unit is enclosed in the same consol as the camera control unit. Here we put together all the recorded sequences to a programme. We add titles and other graphics. 1 - 3 persons are involved in the editing work, at the same time.
- A separate sound section can be used alone or together with video recording or editing. For example for a commentator. 1 - 2 persons are working here.

All information about the operatin crew, is of course, without the performers.

There are a few doubts about the new equipment. A "Sync Generator", a very expensive thing, is ordered and delivered, in spite of the fact that it has no function at all. The cameras are half-way equipped for studio work. The studio view finder, which is delivered, can only be used together with separate control handles for zoom and focus, which are not ordered or delivered. See equipment list and suggestions for complementaries.

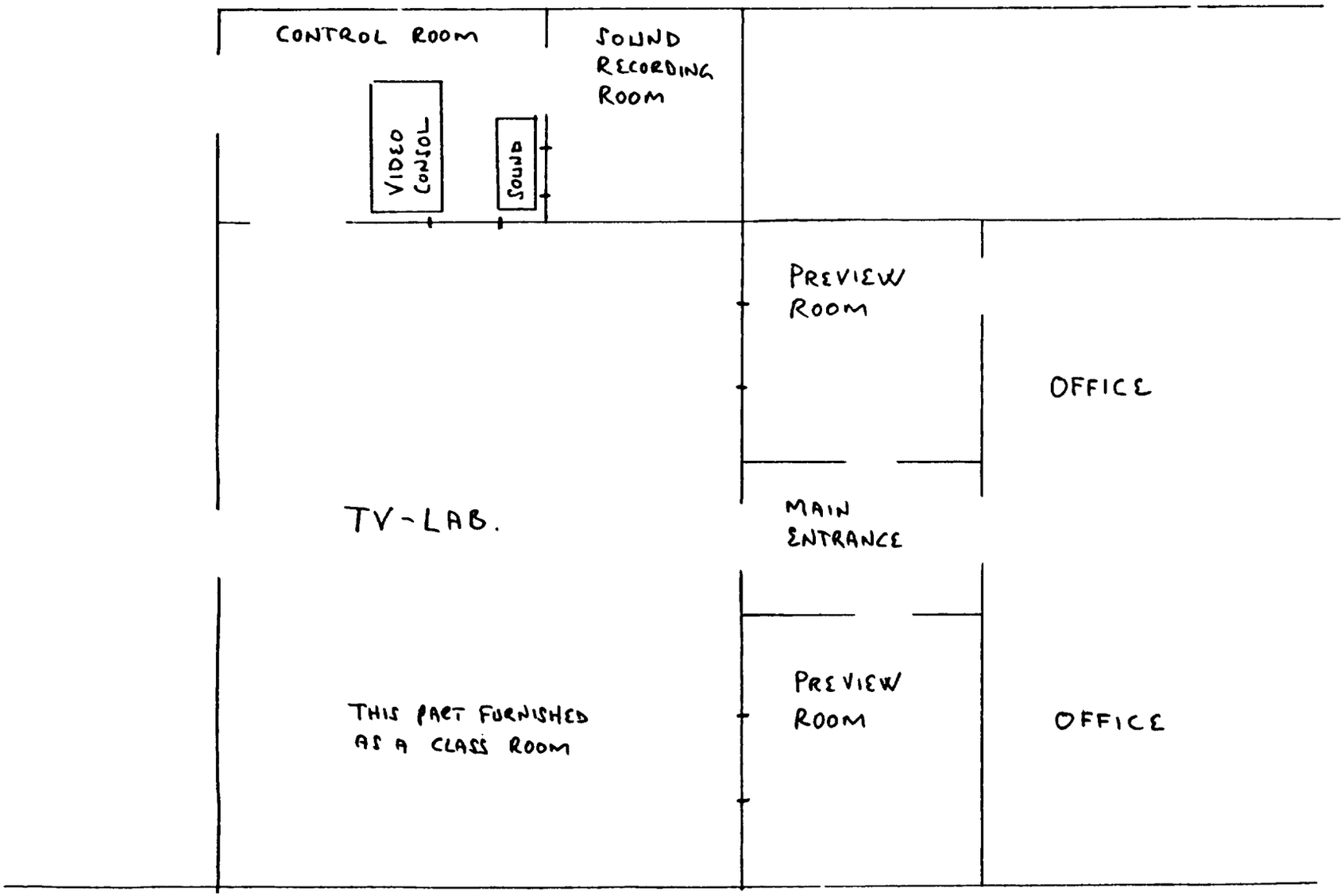
SUGGESTED OPTIONALS

First stage:

2 pcs of CMA-7CE, Sony AC power adaptors, for field use.
4 " Clip microphones, Sony Electret
4 " Dynamic microphones
2 " Flexible cable unit, for studio focus control
2 " Servo control unit, for studio zoom control
1 " VHS Home video machine
1 " Beta "
1 " Special camera stand for b/w camera

Second stage:

1 pcs of Chroma Key Generator, for background generation.
1 " Twin Time Base Corrector, for syncronous VTR's
2 " Better Pan Heads for the tripods
1 " Video Projector, in the ceiling of the Auditorium
1 " U-Matic Low Band player
1 " Video and sound connector board
1 " Caracter Generator


CONTROL ROOM
SOUND RECORDING ROOM
VIDEO CONSOL
SOUND
PREVIEW ROOM
OFFICE
TV-LAB.
MAIN ENTRANCE
THIS PART FURNISHED AS A CLASS ROOM
PREVIEW ROOM
OFFICE

Producers check list for:

PRODUCTION PLANNING IN TV-BROADCASTING

Bengt Högberg, SIET, -63

1. Production planning begins with SCRIPT STUDY.

The script shall give us information about: General scene descriptions - Time - Location - Action - Format - Duration - Positions - Shots - Dialogue - Audio - Film/Tape inserts - Light

The Formats are many. But in general planning they can be reduced to three groups

Documentaries, News, Sport, Interviews, Panel discussions

Education, Children, Presentation, Science

Drama, Music, Show, Promotion, Commercials

	Very well rehearsed and planned	Rehearsed and planned	Unrehearsed but planned
2. Preliminary or final BUDGET	X	X	X
3. Select DIRECTOR	X	X	X
4. SCRIPT EDITING or rewriting	X	X	
5. MARKET, Saleability	X	X	X
6. RESEARCH, Advisors, Experts (if not completed in the script)		X	X
7. DEADLINES	X	X	X
8. CASTING, Contacts, Auditions, Interviews	X	X	
9. COPYRIGHTS, Contracts, Insurance	X	X	X
10. PUBLICITY	X	X	X
11. Final BUDGET	X		
12. Booking of STUDIO or LOKATION	X	X	X

	Very well rehearsed and planned	Rehearsed and planned	Unrehearsed but planned
13. AUDIENCE, tickets, seating, hostess, warm up	X		X
14. SET DESIGN, Make up and Costumes briefing	X	X	X
15. GRAPHICS and TITLES	X	X	X
16. Booking of PRODUCTION PERSONNEL	X	X	X
17. Booking of TECHNICAL FACILITIES	X	X	X
18. ARCHIVE material available (Film, Tape, Graphics, Photos)		X	X
19. PRETAPING or FILMING (Access permitions, Facility fees, Personnel, Technical equipment)	X	X	X
20. Extra EQUIPMENT check (Monitors, Equipment for demonstrations, Prompters, Electronic titling, Special lenses, Cranes, Soft focus, Star filters)	X	X	X
21. STAGING PLAN ready	X	X	
22. RUN DOWN SHEET ready	X	X	X
23. PERFORMERS briefing (Actors, Commentators, Choreographers, Floor Manager, Musicians, Announcer, Artists, Narrator)	X	X	X
24. Pre studio/location REHEARSALS	X		
25. PRODUCTION PERSONNEL briefing (Light Director, Audio, Technical Manager, Floor Manager, Hostess, Script Girl, Production Assistant, Vision Mixer, Cameramen, Prop men, Special effects, Video Operator)	X	X	X
26. Studio or Location REHEARSAL	X	X	
27. If direct. TRAILING and promotion	X		X
28. Continued REHEARSAL	X	X	

	Very Well rehear-sed and planned	Rehear-sed and planned	Unre-hearsed but planned
29. If direct. Last check with CONTINUITY CONTROL ROOM for transmission. (Are we on time. Any announce-ments, Expected duration)	X		X
30. Last seek with PRODUCTION PERSONNEL. LAght, Camera, Audio, VTR, Scanner/Telecine, Floor Manager)	X	X	X
31. TAPING, FILMING or DIRECT/LIVE	X	X	X
32. Off line SELECTION of recorded material	X	X	X
33. Do a LIST of everything recorded	X	X	X
34. Select additional MUSIC and other sounds	X	X	X
35. Decide archi-e film or tape INSERTS	X	X	X
36. SPEAKER recording	X	X	X
37. PUBLICITY, Promotion and announcing	X	X	X
38. EDITING, narration, titling, stills	X	X	X
39. TRAILING	X	X	X
40. BROADCASTING/TRANSMISSION	X	X	X
41. EVALUATION	X	X	X
42. SELLING, copying	X	X	X
43. DISTRIBUTION	X	X	X

A VERY BRIEF INTRODUCTION TO VIDEO/TV PRODUCTION

by

Bengt Hoegberg
UNIDO Consultant at SIET Institute
December 1983

Content

1. THE INFORMATION NEED

Examples

- The ordinary channels for making your company, institute or department, known, in "wider circles", are perhaps insufficient.
- Your new product deserve a better introduction than just an add.
- A course is wanted to be more visual and thus more effective.
- Centralised information, about, for example, agriculture, social rights or hygiene, is to be brought out to the villages.

Note some more examples here:

2. WHY VIDEO ?

- Video is more visual. It takes you to the very spot where it happens.
- It is expensive to have one, or several, lecturers travelling.

  (But, important, the video program does not always replace the person. It is essential to answer eventual questions, afterwards).
- The lecturer can not always be in a good teaching mood. At the screen he is.
- Video does not cost as much as film recording.
- Video is easy to show.

3. TWO IMPORTANT QUESTIONS

Before you start the planning and writing of a program, you must answer two important questions.

1. What do you want to tell ?

Of course you want the program to contain full information about your subject. But you have to reduce it to the most essential. A practical length of an information program is very seldom more than 20 minutes.

2. Who is going to see the program ?

It is very important to adapt a program to its viewers. Is it, for example, children or adults who is going to see it ? Are they well educated, or not ? Is it a program for specialists ? Is it for your customers or is it for internal use ? And so on.

Notes:

4. THE SYNOPSIS or outline script.

After having answered the two important questions it is time for the Synopsis. Which you can call a "Head lines script" or a "Key words script".

It is often just one sheet of paper. Something like this:

SIET INSTITUTE

A Short presentation

1. Its function and commitment
2. Started in 1960
3. Students from all over the world

5. DISCUSSIONS

After having done the Synopsis it is important to discuss it together with experts, participants and other who will be engaged.

Important questions are:

- Who is writing the script ?
- Are we using professional actors ?
- Do we have to engage additional experts ?
- Is it a studio production or do we record in the field. or perhaps both.
- Which technical facilities do we need ? Book them well in advance.
- Exact form of the program.
- And, what are the costs ?

Perhaps do you have to rewrite the synopsis now. If you are engaging a professional writer, it is his task to do it.

The writer often needs a prescript from the experts of this programmes particular field.

Thereafter comes new discussions.

6. THE SCRIPT

The most simple one is the written text, with picture and sound comments in the margin.

But we want a more useful one. Like this:

T I T L E

(1) A general description of the first scene.

Picture	Text	Audio
(Descriptions with or without drawings)	(Speaker, actors or interview)	(Additional sound like music, extra background a.s.o.)
(One description for each picture)		

(2) A general description of the second scene.

Pictures	Text	Audio

And so on

7. THE PRODUCTION PERSONNEL

From the one mans job, to a complete television live production. Recordings at the field and in studio.

One man, 1 camera — Off course, he is doing everything.

Two men, 1 camera
1. Camera/Lighting/Director
2. Audio/VTR/Assistant

Three men, 1 or 2
1. Camera 1/Lighting
2. Camera 2/Assistant/Electrician
3. Mixer/Audio/VTR/Director

Four men, 1, 2 or 3 cameras
1. Camera 1/Lighting
2. Camera 2/Assistant/Electrician
3. Camera 3 or Mixer/Director
4. Mixer/Audio/VTR/Director or Audio/VTR

A full size television studio is manned by 30 to 50 persons. For example by:

At the floor

Cameramen with assistants
Audio men
Floor manager
Electricians
And sometimes the director

In the control room

The Producer/Director and sometimes the sponsor
The script girl
Vision mixer
Technical Operations Manager. TOM
Audio ing.
Audio operator
Lighting ing.
Lighting operator
Video ing.

And in the surroundings

VTR operators
Scanner operators
Technical service personnel
Hostesses
Prop men
Carpenters
Make up artists
Set designer
Graphic designer
Costumes
Special effects
and many more

Notes:

8. TYPES OF PRODUCTIONS

There is a variety of different types of video productions. For example:

For Broadcasting

- Documentaries, news and educational programmes
- Drama, dramadocumentaries, music and show programmes

But most important for us are

- CCTV educational programmes
- Industrial presentations
- Product and production presentations
- Internal communications
- Commercials
- Case studies
- And sometimes video is used for behavior training and role plays.

Note some more fields in which video can be used:

9. RECORDING IN THE FIELD

Try to follow these guidelines:

- Do not rush. Do the adjustments on the camera in good time.
- Also lighting and microphone set in good time.
- If you are the director or the buyer. Let the crew get their time for adjustments. It can take an hour or perhaps two.
- To save time. Do all the scenes from one place at the same time.
- If using a multicamera unit. Be sure to put all the cameras at the same side of the object. (The 180' rule)
- Use a tripod, when you can.
- Also, a monitor, for easy checking of picture quality.
- Do not unnessesarly move the camera and zoom. Let "the object move within the picture".
- Think of "the Golden Cut". The most important part of the picture is often 1/3 from above. For example one persons eyes.

Notes:

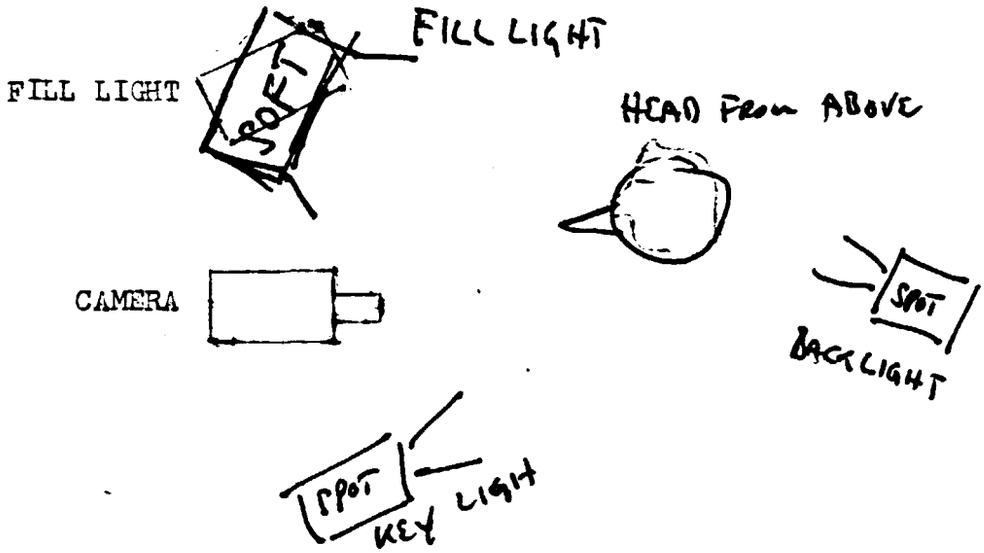
10. RECORDING IN STUDIO

- It is always faster to do the recordings in a studio, where lighting, cameras and audio is already prepared. Neverthe less, <u>be patient</u>. A complex technical equipment, can often fail.
- Studio recordings are often used for comments and summaries, after the field recordings. Often at the same time as the editing.
- It is also very common that one records the whole story, with the commentator alone, in front of the camera, first. Then illustrate it with pictures from the field.
- It is often more easy to move people and props to the studio, than the equipment out to the field. But it is <u>always much more interesting</u> with a real background and surroundings.

11. LIGHTING

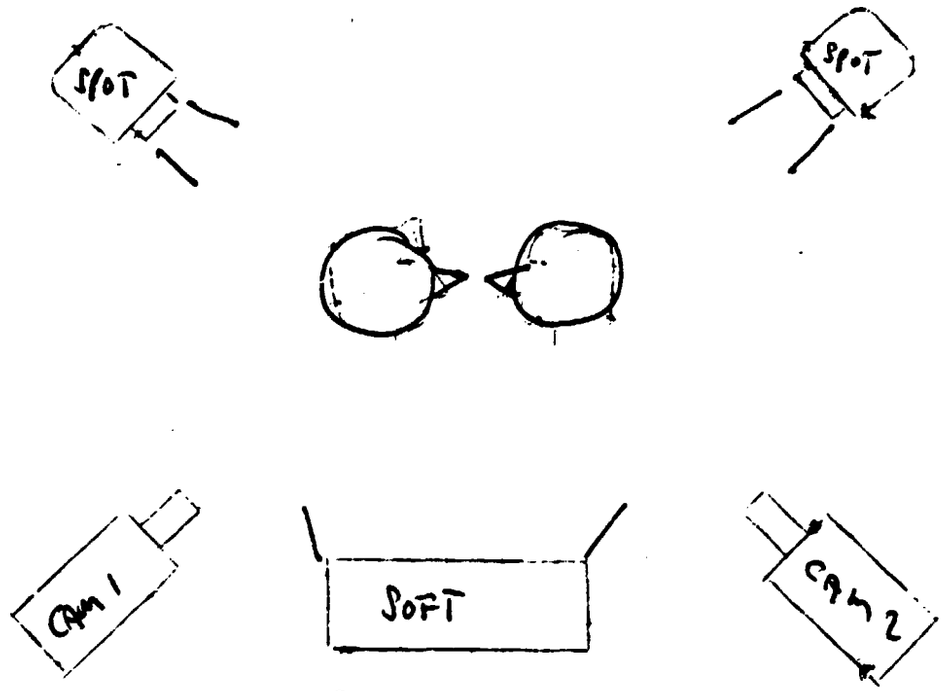
Indoor recordings need extra lighting. And sometimes outdoors too. And that is very often the cameramans responsibility.

The basic lighting of a face is like this:



It often becomes quite warm in a room with many lamps. So in every break, use a handkerchief and if necessary, powder, for the perspiration.

Two persons, against each other:



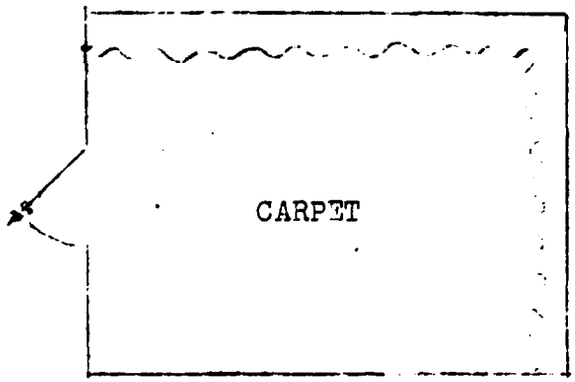
Beware of shadows:

- Put the actors at least 2 meters from the background.
- Hanging microphones often ngect shadows on the background or in peoples faces.
- An unwanted shadow can be reduced with special background light.
- Think of the power problems. More than one 1000 W lamp, often blows the fuses. Try to spread the cables, from the lamps, to different places in the building.

Notes:

12. AUDIO

Beware of the echo in rooms. You can reduce it by putting up some cloth at two walls and also use a thick carpet. Like this:



- Try to keep the microphone very near the speaker.
- If two or more people speak, in an ordinary room, you have to have one microphone for each. Or a handmike or a boom.
- Small clip microphones are very useful.

- If possible, use balanced equipment and cables. Disturbances "from the air" otherwise occur.

- A very directional mike on the camera is mostly for background sound.

- Always listen to the sound, while recording.

- Do not forget to renew the batteries in condenser mikes. And keep all the cables intact.

13. EDITING

- Editing is often a one man's job. But sometimes he need the assistance from a cameraman, for additional pictures, For example captions or a commentator.

- First of all. Look through all the material and a list of everything recorded. Like this:

SIET TAPE 1

Nature, rocks, trees, flowers, birds, farmers.

0	A big rock
2'30"	Palm trees
5'10"	Hibiscus flowers
8'50"	Parrots
9'30"	Farmer Plaighing

And so on

- Plan the editing with marks and comments in the script.

- Do it right from the begining. Remember that you cannot take anything out, or put anything in, afterwards, without rediting after the correction. Or to make a copy and get a generation older tape.

- In ¾" editing, the copy shall not be older than third generation. And that leaves no space for mistakes.

- One of the most important rules are: "Kill your darlings" and that means. Do not make too long sequences.

- If you are the buyer of the program. Let the cutter do a rough version first. It is very straining to go through all the originals.

- Time code editing, is the best and easiest way.

- Control pulse editing, takes a little longer time.

- Record a sync at the master tape first. For example colour bars. Then use insert editing with split picture and sound tracks.

- Some tapes, for example Sony, are not, yet, perfect. A small disturbance, in the picture, like a running wave, occurs when the tape has been in stand by position, for one or two minutes. That is not the situation with, for example, Fuji.

- Some more of the rules in editing are:

* Don't cut between similar pictures. If you do, get a so called "Jump cut"
* Use a short detail or full shot picture in between.
* Try to follow the movement in the first picture. To cut between two contradictional movements are very stressing.
* There are many details which link pictures together. For example ~~el.ljr,~~ movement, the direction of one persons eyes, what's expected to be seen and also the sound overlapping the pictures, is very important.

- And again. Make it short.

Notes:

14. COPYING

First, Do not copy any program, without the producers or owners approval. Otherwise it can be very expensive.

You are probably using ¾" or 1" for original and master tape. The best copies are, of course, also of that format. But they are unnessesarly expensive. Both the tape and the copying machines.

It's more appropriate to use Beta, VHS or V-2000 video cassette recorders as "slaves". (Copying machines)

If you connect more than two slaves, to the master machine, you have to have a video and audio distribution unit.

SE 2ND AND LAST PAGE

SONY CORPORATION

7-35 KITASHINAGAWA 6-CHOME, SHINAGAWA-KU TOKYO 141 JAPAN

TELEX SONYCORP J72262
CABLE SONYCORP TOKYO
TELEPHONE 448-2111

INVOICE & PACKING LIST

Invoice No. HK057-00 (8-893300)
Date JAN. 23. 1984

For account and risk of
Messrs.

UNITED NATIONS DEVELOPMENT
ORGANIZATION
P.O.BOX 300, A-1400 VIENNA
AUSTRIA

Marks

-DETAILS AS PER
ATTACHED SHEETS-

Consignee
RESIDENT REPRESENTATIVE
UNITED NATIONS DEVELOPMENT PROGRAMME
P.O.BOX 3059 NEW DELHI 110003 INDIA
PROJECT: DP/IND/83/002

Shipment per AIR EXPRESS
On or About JAN. 24, 1984

From TOKYO
To BOMBAY
Via DIRECT

S/C No.	Description of Goods	Quantity	Unit	Unit Price	Amount
	PURCHASE ORDER NO. 15-3-A0959		Price Base	FOB	JAPAN NR.YEN
HP1b741E	PARTS FOR VIDEO CASSETTE RECORDER -DETAILS AS PER ATTACHED SHEETS-	4	PCS	VARIOUS	89,000.00
HV1206	AVC-3250CES VIDEO CAMERA (B/W) AC ONLY (ITEM NO.ADD.15)	1	SET	75,600.00	75,600.00
	PVM-411CE B/W MONITOR TELEVISION (ITEM NO.ADD.7)	1	SET	168,000.00	168,000.00
	CVM-2000PSE SONY TRINICON COLOR RECEIVER/MONITOR (ITEM NO.ADD.1)	2	SETS	175,000.00	350,000.00
	PVM-91CE B/W MONITOR TELEVISION (ITEM NO.ADD.17)	1	SET	53,000.00	53,000.00
	PVM-1370QM SONY TRINITRON COLOR VIDEO MONITER (ITEM NO.ADD.2 & 13)	6	SETS	176,400.00	1,058,400.00

TO BE CONTINUED

c/d 1,794,000.00

CAN NOT BE USED WITHOUT CONTROL HANDLES FOR ZOOM AND FOCUS

		HK057-00 b/d	(8-892300) 2 1,794,000.00
DXF-50CE ELECTRONIC VIEWFINDER (5-INCH) (ITEM NO.ADD.1)	2 SETS	130,000.00	260,000.00
VO-4800PS PORTABLE COLOR VIDEO CASSETTE RECORDER (ITEM NO.2)	2 SETS	399,000.00	798,000.00
VO-5850P COLOR VIDEOCASSETTE RECORDER AC ONLY (ITEM NO.3)	2 SETS	827,000.00	1,654,000.00
DXC-M3PK VIDEO COLOR CAMERA (ITEM NO.1)	2 SETS	1,240,000.00	2,480,000.00
ECM-23F ELECTRET CONDENSER MICROPHONE (ITEM NO.ADD.9)	2 PCS.	19,200.00	38,400.00
KCA-60 VIDEOCASSETTE RECORDING TAPE (ITEM NO.5-2)	96 PCS.	4,000.00	384,000.00
KCS-20 VIDEOCASSETTE RECORDING TAPE (ITEM NO.5-1)	96 PCS.	2,300.00	220,800.00
MX-P21 8-CHANNEL MICROPHONE MIXER/STEREO (ITEM NO.ADD.10)	1 SET	276,000.00	276,000.00
CCQ-10AR COLOR CAMERA CABLE W/CONNECTORS (ITEM NO.14)	2 PCS.	18,500.00	37,000.00

TO BE CONTINUED

C/d 7,942200.00

HK057-00 (8-892300)

b/d 7,942,200.00

CCQ-25AM COLOR CAMERA CABLE W/CONNECTORS (ITEM NO.ADD.5)	2 PCS.	39,000.00	78,000.00
BC-20CE BATTERY CHARGER (ITEM NO.7)	2 SETS	24,000.00	48,000.00
VCL-1205 ZOOM LENS (ITEM NO.ADD.16)	1 PC.	28,800.00	28,800.00
BB-32 LAMP FOR CAT-KIT-220 (10PCS) MADE IN U.S.A. (ITEM NO.12)	2 PKGS	63,000.00	126,000.00
DR-100 HEADSET (ITEM NO.ADD.3)	3 SETS	15,000.00	45,000.00
RCC-5F REMOTE CONTROL CABLE W/CONNECTORS (ITEM NO.4-2)	2 PCS.	14,200.00	28,400.00
RM-440 AUTOMATIC EDITING CONTROL WITH WIRE (ITEM NO.4-1)	1 SET	176,000.00	176,000.00
CCU-M3P CAMERA CONTROL UNIT (ITEM NO.ADD.2)	2 SETS	170,000.00	340,000.00
VDC-5 VIDEO DUBBING CABLE (ITEM NO.14)	1 PC.	5,000.00	5,000.00

c/d 8,817,400.00

TO BE CONTINUED

			HX057-00	(8-892300) 8,817,400.00
	CMA-7CE CAMERA ADAPTOR FOR DXC-1800/6000 SERIES (AC ONLY) (ITEM NO.ADD.4)	2 SETS	53,500.00	107,000.00
	BP-50 RECHAGABLE BATTERY PACK (ITEM NO.6)	8 SETS	7,600.00	60,800.00
	SEG-2000AP COLOR SPECIAL EFFECTS GENERATOR (ITEM NO.ADD.6)	1 SET	709,000.00	709,000.00
	SAM-TPD-3 TRIPOD/DOLLY SET MADE IN U.S.A. (ITEM NO.13)	2 SETS	128,000.00	256,000.00
	CAT-KIT-3 PORTABLE LIGHTING KIT (ITEM NO.11)	2 KITS	92,400.00	184,800.00
	PVM-9000ME COLOR MONITOR TELEVISION (ITEM NO.ADD.8)	2 SETS	136,000.00	272,000.00
	C-74 CONDENSER MICROPHONE (ITEM NO.8)	2 PCS.	73,700.00	147,400.00
HX102300	CONNECTING CABLES -DETAILS AS PER ATTACHED SHEETS-	1 SET	100,000.00	100,000.00

TO BE CONTINUED

TOTAL 10,654,400.00

TOTAL: 2 KITS 2 PKGS 208 PCS & 44 SETS				FOB	NR.YEN 10,554,400.00
				FREIGHT	NR.YEN 817,016.00
TWENTY-SIX (26) PACKAGES 699.5 KGS.				C&F/BOMBAY	NR.YEN 11,471,416.00

COVERED BY CHECK AT 30DAYS AFT DELIVERY

PACKING LIST:

HK057-00-8				
C/NO.1	AVC-3250CES	1 SET.	108.0 KGS.	
	CVM-2000PSE	2 SETS.		
	ECM-23F	2 PCS.		
	CCQ-10AR	2 PCS.		
	BC-20CE	2 SETS.		
	VCL-1206	1 PC.		
	B8-32	2 PKGS.		
	DR-100	3 SETS.		
	RCC-5F	2 PCS.		
	VDC-5	1 PC.		
	BP-60	8 SETS.		
C/NO.2	PVM-411CE	1 SET.	128.0 KGS.	
	VO-4800PS	2 SETS.		
	KCS-20	48 PCS.		
	MX-P21	1 SET.		
	CCQ-25AM	2 PCS.		
	RM-440	1 SET.		
	SEC-2000AP	1 SET.		
C/NO.3	VO-5850P	2 SETS.	136.0 KGS.	
	DXC-M3PK	2 SETS.		
	KCS-20	48 PCS.		
	CMA-7CE	2 SETS.		
C/NO.4	PVM-91CE	1 SET.	18.3 KGS.	
	CCU-M3P	2 SETS.		
C/NO.5-10	PVM-1370QM	(@ 1 SET)	(@ 19.0 KGS)	
		6 SETS.	114.0 KGS.	
C/NO.11	DXF-50CE	2 SETS.	9.0 KGS.	
C/NO.12-19	KCA-60	(@12 PCS)	(@ 21.5 KGS)	
		96 PCS.	100.0 KGS.	
C/NO.20-21	SAM-TPD-3	(@ 1 SET)	(@ 11.2 KGS)	
		2 SETS.	22.4 KGS.	
C/NO.22-23	CAT-KIT-3	(@ 1 KIT)	(@ 11.8 KGS)	SONY CORPORATION
		2 KITS.	23.6 KGS.	
HP16741E				
C/NO.1	ATTACHED SHEETS	4 PCS.	1.4 KGS.	
HX102300				
C/NO.1	ATTACHED SHEETS	1 SET.	11.8 KGS.	P.P. MANAGER INT'L OPERATIONS GROUP
HK057-20-8				
C/NO.1	PVM-9000ME	2 SETS.	27.0 KGS.	
	C-74	2 PCS.		
TOTAL: 2 KITS 2 PKGS 208 PCS & 44 SETS			699.5 KGS.	

E. & O. E.

DATE: 25 OCTOBER 1981

KLF NO. 15-3-0959

SET OF CONNECTING CORD

ITEM	MODEL NAME	DESCRIPTION	Q'TY	UNIT PRICE	AMOUNT
1	UGC-2	VIDEO COAXIAL CABLE BNC CONNECTORS 2M	10 PCS	2,300.	23,000 23,00
2	BNC-M2	VIDEO COAXIAL CABLE BNC-UHF 2M	2 PCS	3,000.	6,000 6,00
3	UGC-5	VIDEO COAXIAL CABLE BNC CONNECTORS 5M	2 PCS	3,000.	6,000 6,00
4	UGC-10	VIDEO COAXIAL CABLE BNC CONNECTORS 10M	2 PCS	3,700.	7,400 7,40
5	CCDD-0.6	CONNECTING CABLE 4PIN M-4PIN F	2 PCS	2,900.	5,800 5,80
6	CCDD-2.5	CONNECTING CABLE DIN-DIN.MD-1600/DXC-1800	3 PCS	1,400.	4,200 4,20
7	RK-G34	CONNECTING CORD 3M MINI PLUG/MINI PLUG	3 PCS	460.	1,380 1,38
8	RK-C150	AUDIO CONNECTING CORD	5 PCS	800.	4,000 4,00
9	RK-C102	AUDIO CONNECTING CORD	2 PCS	1,040.	2,080 2,08
10	RK-C111	AUDIO CONNECTING CORD	5 PCS	560.	2,800 2,80
11	EC-10XLR	MIC EXTENSION CORD 10M CANNON M-F	3 PCS	5,900.	17,700 17,70
12	EC-5C	MIC EXTENSION CORD 5M CANNON	2 PCS	3,680.	7,360 7,36
13	PC-1M	PLUG ADAPTOR	2 PCS	290.	580 58
14	MDR-90-2	HEADPHONE	1 PC	5,500.	5,500 5,50
15	UGC-25	VIDEO COAXIAL CABLE BNC CONNECTORS 25M	1 PC	6,200.	6,200 6,20

TOTAL YEN 100,00

Attached Sheet

Lot No. Messrs, Date Page

Order No.	Parts Code No.	Description / for Model	Quantity PCS	Unit Price	Amount	Net Weight KGS	C/No.

UNITED NATIONS
DEVELOPMENT PROGRAMME

संयुक्त राष्ट्र
विकास कार्यक्रम

TELEX : UNDP-ND-3611
CABLES : UNDEVPRO-NEW DELHI
TELEPHONE : 690410

55, LODI ESTATE
NEW DELHI-110003
(INDIA)

POST BOX NO. 3059

REGISTERED

Reference IND/83/002(37)E(959)

24 February 1984

Dear Sir,

We are forwarding herewith the following shipping documents in respect of FOUR (4) case(s) of equipment shipped per s. s AIR against UNIDO Purchase order No. 15-3-A0959:

1. [redacted]AWB No. 098-4381 0760 dated 17 February 1984
2. Exemption Certificate UNDP/222/34
3. Octroi Certificate
4. Insurance intructions
5. Invoice
6. Packing List

Kindly clear the consignment through customs on duty-free basis. After clearance, the case(s) should be sent to :

Dr. S.C. Raghu
Principal Director
Small Instry Extension Training Institute
Yousufguda
Hyderabad - 500 045

by airfreight/[redacted]under advice to this office. Any deviation from this instruction should be done with prior concurrence of our Bombay Office.

Your statement of account (duly pre-receipted) may please be sent to Mr. M. L. Pania for certification and onward transmission to this office for settlement.

Yours truly,

O. P. KHANNA
Equipment Officer
for Resident Representative

Messrs Babaji Shivram Clearing
& Carriers Pvt. Limited
407 Rex Chambers
Wilchand Hirachand Marg
Balla d Estate
Bombay-400 038

cc: Mr. D. Cardellia, UNIDO, Vienna
cc: Mr. M.L. Pania, UNDP, Bombay
cc: Mr. T.R. Mankan
cc: Dr. S.C. Raghu, with a copy of invoice. Kindly sign and return two copies of the enclosed receipt voucher, in acknowledgement of the consignment.

VPC

SONY CORPORATION
TOKYO.JAPAN

RESIDENT REPRESENTATIVE UNITED NATIONS
DEVELOPMENT PROGRAMME P.O.BOX 3059
NEW DELHI 110003, INDIA
PROJECT: DP/IND/83/002

Y.S. AIR LIMITED. TOKYO.JAPAN

16-3 1500/010

TOKYO

BOM AI

JYE X N.V.D.

BOMBAY AI-315/18

NOTIFY: UNITED NATIONS DEVELOPMENT ORGANIZATION
P.O.BOX 300, A-1400 VIENNA AUSTRIA.

(HK061-00-8,HK061-10-8)

4	65.3 K	C-4402	100.0	1,168.-	116,800.-	PURCHASE ORDER NO.15-3-A095 PROJECT NO. DP/IND/83/002 CASSETTE TAPE DECK & OTHERS INV.NO.HK061-00

MARKS: RESIDENT REPRESENTATIVE
UNITED NATIONS DEVELOPMENT
PROGRAMME
P.O.BOX 3059
NEW DELHI 110003
INDIA
PROJECT: DP/IND/83/002
PURCHASE ORDER: 15-3-A0959
HK061-00-8 C/NO.1-2
HX205500 C/NO.1-2

COUNTRY OF ORIGIN : JAPAN

DIMENSION: 56 x 53 x 46cm x 1 c/t
52 x 28 x 43cm x 1 c/t
67 x 47 x 44cm x 1 c/t
96 x 41 x 64cm x 1 c/t (V.98.5KGS)

TOTAL:FOUR(4)CARTONS ONLY

116,800.- AWB FEE:JYE450.-

450.-

117,250.- 17.FEB.1984 TOKYO.JAPAN YSA/TYO HM/YY

098-4381 0760

SONY CORPORATION

006899 00

7-35 KITASHINAGAWA 6-CHOME, SHINAGAWA-KU TOKYO 141 JAPAN
TELEX SONYCORP J22262
CABLE SONYCORP TOKYO
TELEPHONE 448-2111

INVOICE & PACKING LIST

Invoice No. HK061-00 (8-892300)
Date FEB. 16. 1984

For account and risk of
Messrs.
UNITED NATIONS DEVELOPMENT
ORGANIZATION
P.O.BOX 300, A-1400 VIENNA
AUSTRIA

Marks
RESIDENT REPRESENTATIVE
UNITED NATIONS DEVELOPMENT
PROGRAMME
P.O.BOX 3059
NEW DELHI 110003
INDIA
PROJECT: DP/IND/83/002
PURCHASE ORDER: 15-3-A0959
HK061-00-8 C/NO.1-2 ED205500 C/NO.1-2

Consignee
RESIDENT REPRESENTATIVE UNITED NATIONS
DEVELOPMENT PROGRAMME P.O.BOX 3059
NEW DELHI 110003, INDIA
PROJECT: DP/IND/83/002

Shipment per AIR EXPRESS
On or About FEB. 17, 1984

From TOKYO
To BOMBAY
Via DIRECT

C/C No.	Description of Goods	Quantity	Unit	Unit Price	Amount
PURCHASE ORDER NO. 15-3-A0959 PROJECT NO. DP/IND/83/002			Price Base	FOB	JAPAN NR.YEN
31705	TC-FA35 CASSETTE TAPE DECK AC ONLY STEREO (ITEM NO. ADD.13)	1	SET	31,500.00	31,500.00
	TA-AX35 STEREO AMPLIFIER AC-ONLY (ITEM NO. ADD.12)	1	SET	21,700.00	21,700.00
	PS-LX20 RECORD PLAYER AC-ONLY (ITEM NO. ADD.11)	1	SET	17,500.00	17,500.00
	APM-500 HI-FI SPEAKER SYSTEM (FLAT DIAPHRAM 2 WAY) (ITEM NO. ADD.14)	1	PAIR	30,000.00	30,000.00
	UCX-S 60 AUDIO CASSETTE TAPE NON RECORDED (ITEM NO. ADD.19)	50	PCS.	300.00	15,000.00
	EC-0.5C2 MICROPHONE CABLE W/CONNECTORS (ITEM NO. 9)	2	PCS.	3,700.00	7,400.00
				c/d	123,100.00

TO BE CONTINUED