

SPECIAL REPORT



● In *When The Raven Flies*, Gunnlaugsson achieves with the Viking saga what Sergio Leone did with the western

A film director's conversion Editing on VHS

by Hrafn Gunnlaugsson

Why video instead of a cutting table?

I have often found myself sitting over a difficult scene on the cutting table, lengthening, shortening, changing, adding, until the work print had become scratched and sticky, jumping about on the screen every time we made a cut. When you have to deal with very precise action and you have finished splicing the clips together, it can be difficult to know whether the editing has really worked. It doesn't make it any easier when some of the frames get lost or destroyed and you have to substitute from the leader.

My curiosity was aroused when Sven Skans, the head of the video department at AB-Film Teknik in Stockholm, informed me that they had got a system which could play the negative straight onto VHS cassettes with the time-code. They had edited some commercials with this method straight onto VHS, and it went quite well. That meant that, instead of making a workprint, the negative film could be put onto cassette and then selected and edited. He called it the EFC system. This method obviously led to the additional possibility of being able to edit many versions of the same scene, one after the other without ripping the first one apart, because the

videomaster always remained unchanged however many copies were made of it. It was also possible to preview all the clips before they were processed and add or subtract one or more frames after each preview if you needed a very tight clip.

The editing systems that I considered using were the Panasonic 8500 video cassette recorder, and the editing controller NV-A500. When I had experimented with some other material, I decided to use this method for *When the Raven Flies*. In other words, no work print – just the negative put onto cassette and edited through the video.

The editing itself

To make sure it was safe, the laboratory ran all the negative through an analyser as soon as the developing was finished to check whether there were any scratches or lighting errors before it was played onto the cassette. No visible errors appeared, and I had all the material – some 17 hours – sent on 10 VHS cassettes to Iceland. The laboratory is in Stockholm, but I did the editing here in Iceland. Unfortunately, Iceland is so small that it does not have a laboratory.

When I got hold of the cassettes, the

soundman synchronized all the sound we had recorded onto them. That took him about three days. We used an ordinary Revox tape-recorder attached to a video machine, and put the sound onto the soundtrack of the video cassette. The idea from the beginning was to post-synchronize all the dialogue, so this was our guide-track. In this way, I was able to make sure that the pace of the dialogue was in keeping with the editing.

The new video machinery dispensed with the need for an editor to find and put together all the clips, so that I managed to do all the editing myself at home. I edited each scene separately on individual cassettes, and usually ended up with three to four versions of each scene. This method proved to be unproblematic, and in four weeks I had finished editing all the scenes and began to put them together. When that was over, I had a 150-minute film which was 40 minutes longer than the original estimate.

At this stage of the proceedings, the usefulness of this system became apparent. I was able to sit at home in front of a television screen, together with my assistants, and go over all the various prints of individual scenes, lengthening or shortening them without destroying what I had already made. This method was inspiring because it prompted one to experiment with daring and innovative changes, all of which could be made within a very short time. After a lot of careful viewing and many changes, the video-print was finally ready. The quality of the film on the cassette was beginning to decline a little since the final copy was four generations from the master. Actually, though, that didn't matter – the time code was still legible.

Various technical problems

Up to then, everything had gone fine. The soundman used the cassettes that I had edited to post-synchronize the dialogue, and we went back to Stockholm to finish off the work.

The next stage was to film a telecopy of the video cassette. The idea here was to use the telecopy to cut down the amount of time for the sound-tracking, if that should be necessary. When the sound work was over, the next plan was to cut the negative according, to the telecopy. When I got hold of the telecopy, it turned out that the time code was doubled up in some of the shots, as if the film and the video were not synchronized. Naturally, we were really surprised because for the first time it looked as if the EFC system had gone wrong. After a thorough investigation as to how this failure had occurred, we found the answer. The video machine had occasionally edited at half-frame – that is to say, that a 50th of a second had been cut out so that some of the frames

The Icelandic film When the Raven Flies, shown at the Berlin Festival last February, and at the recent Atlantic Film and Video Festival in Halifax, was edited on a VHS cassette. No work print was made; instead, all the negative film was played from a scanner straight onto VHS cassettes, to which a time-code was added. The material on the cassettes was then edited together on ordinary VHS machines, and the negative film cut to fit the cassettes according to the time-code. Naturally, this sounds a bit hard to believe, and a lot of questions were asked while this method was being used. In the following, the director Hrafn Gunnlaugsson briefly explains why this method was used, how the work progressed, what sort of problems arose, and what the outcome was from both a technical and financial point of view.

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were placed in the middle of the ones that preceded them. This of course meant that some shots were variously half-a-frame too long or too short. We decided to solve this problem by taking the negative, selecting one frame either to the right or the left so that each scene as a whole would be equally as long as its counterpart on the telecopy. The only risk was the possible variation of a single frame in two or three of the shots. By doing that, we hoped to retain the synchronization. This method worked, but entailed a good deal more trouble. If this had been foreseen, we could have avoided the problem by setting a frame-lock on the playing of the negative onto the VHS, so that the machine would only have been able to edit one whole frame at a time. Whoever uses this system has to be very careful about this particular detail.

When the negative had been edited and we had run one light-rush print copy through the projector and we saw the film for the first time on a full screen,

several additional errors appeared. On the video monitor some small focusing errors and two light frames did not appear, but on the full screen they were now very obvious. It then became necessary to switch four frames in the negative master. In the end, though, the inconvenience caused here was amply counterbalanced by the speed with which we could use the time-code on the telecopy and find the material by computer.

When these rectifications had been made on the negative so that nothing stood in the way of beginning the mixing, the post-synchronization onto the cassette went so well that we only had to get the actors to repeat very few lines, and that only took one afternoon. The film was then mixed in Dolby stereo and completed like any other film.

Technical outcome

After going through this experience – editing a full-length feature film onto VHS – I can only say: why take the long way round? It is so much more convenient and more stimulating to be able to edit the same scenes in a multitude of variations than it is to sit in a dark editing room, with bits of film covering all the walls, and not be able to see new possibilities without destroying everything that you have already made.

Moreover, this working method allowed us to be able to send the composer of the screen-music copies of the scenes as soon as they had been edited. In this way, he was able to get his work underway before the final editing began. All the problems that came up



● Iceland's D.W. Griffith: Gunnlaugsson at the '84 Montreal World Film Festival

could be easily avoided or completely solved.

The financial side

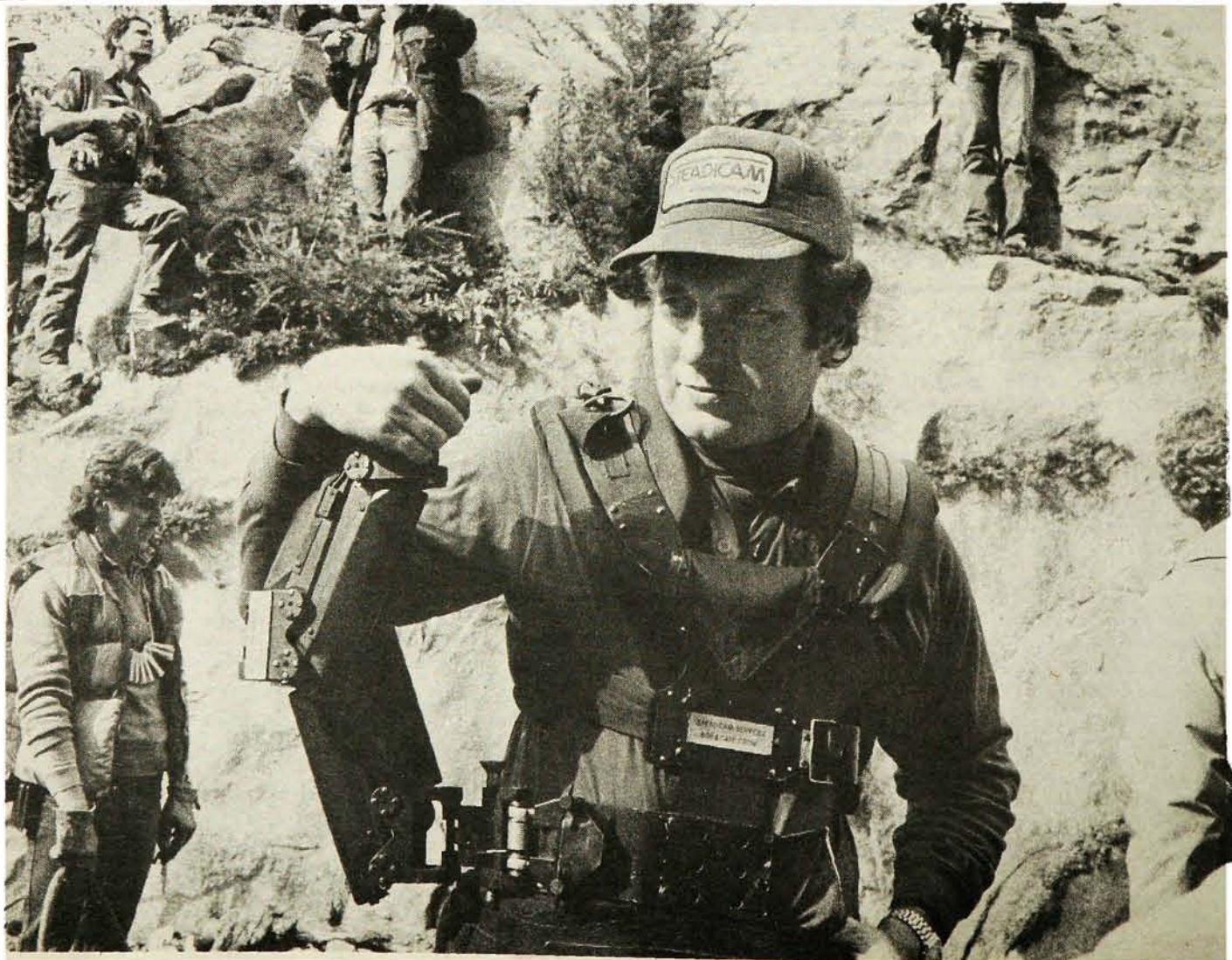
The costs of a work-print, editor, and a cutting table were dispensed with, and in their stead came the cost of scanning all the material, the hire of the video machinery (it is that cheap – about \$4,500 – that it's worthwhile buying it), the telecopy for the negative editing, the light-rush print copy for the mixing, and the lighting quality control.

If a third of the material is printed onto a work-print and 10 weeks taken on the cutting table, the costs of the old cutting-room method and the video-editing method are nearly the same.

The new method has the advantage that *all the material* and not just selected scenes are played onto the video cassettes. That gives one a lot of freedom with the editing because so often

one overlooks the whole and gets wrapped up in the fine details when having to decide which individual takes to print. When it is possible to see all the material together, these kinds of errors can be reduced to a minimum. It also means that the scene and clapperboard markings become unnecessary when using post-synchronization because *all* the material is in the cassette. We didn't use a script-girl to mark the scenes and trusted our own memories for the sound-track guide, where we read in all the information. That presented no problems – thus it was possible to save all the film that would have been used up by the markings, as well as the salary for the script-girl.

If I do another full-length feature, I have no doubts about the method – video. It has everything in its favour, and if you don't believe me, go and see *When the Raven Flies*.



Operator David Crone, and friends on the set of 'Clan of The Cave Bear' looking for his Steadicam. If anyone finds it, please call Bob or Dave Crone at Steadicam and Skycam Services of Canada. (416) 924-9044.