Steadicam Tested for Magnetic Radiation

Low ELF levels reported, but SOA now rents digital meter, urges checking your own equipment

by Garrett Brown

It is well-known that CRT-type monitors emit electric-field and magnetic-field radiation at various frequencies, including the extremely low frequencies (ELF) of 50-60 hertz which are also emitted by power lines and transformers. In the last several years, the public has been alerted to the particular dangers of long-term exposures to ELF by a series of articles based on various scientific studies conducted since 1982. Although there is still controversy over the magnitude of the danger to people from ELF radiation, there is general agreement that some danger exists, particularly in the form of the potentially increased risk of various cancers, including leukemia and brain tumors.

I first became aware of this concern through a series of three articles by Paul Brodeur in The New Yorker in June 1989. At that time I passed copies along to Cinema Products and began the dialogue that led to the current tests to determine if ELF radiation from the Steadicam monitor and electronics might be of concern. An additional Brodeur article appeared this July and accelerated the testing process. The results of the recent tests at CP appear in the accompanying article by Jim Bartell.

Although I feel greatly relieved at the reported low level of magnetic radiation from the Steadicam as compared to computer monitors in

Digital ELF meter showing ELF radiation level of 0 milligauss

Steadicam EFP Review

by Jerry Holway

The Steadicam EFP has been in production for several months now, and it's time to report on its features. You should know that Ted Churchill and I worked on the training videotape for the EFP, and I wrote the EFP instruction manual, so this report contains some bias on my part. I've also worked with six or seven different EFPS, and I've contacted several other users and owners for their comments. I've used the EFP once on a job where it clearly outperformed the Model 3, but more about that later.

Overall, the EFP is a great addition to the Steadicam family, filling in a niche between the green screen versions and the JR. The vest comes in a long and a short size (the long seems less long than the current EFP...continued on page 6

ELF radiation continued on page 8
Plans for a prototype of the amazing F-bracket. Edges should be rounded off and the cross-piece lightened.

**J-bracket obsolete!**

by Jerry Holway

I wish I'd thought of it. There we were, calmly explaining to the group at the October SOA workshop how to go to low mode, when not just one, but two of the participants suggested that the J-bracket could be improved. Heresy! The idea was dismissed (by me, anyway) at first. But such brilliance couldn't be denied forever. It's so simple; such an elegant solution to an old annoyance.

I figured it was just the way things had to be, that going to low mode required having that extra little step at the end, adding the J-bracket after balancing the rig. But no more.

Enter the F-bracket, named after Francois Archambault, one of the two workshop participants who refused to be taken in by the J-bracket cult. The other inventor is Dan Wesson, so you might call it the Dan bracket, or the Dancoise bracket. Just as long as you know to whom you are forever beholden.

The old way: Get camera and rig into low mode and balance rig on light stand. Then attach the J-bracket (pin and clamp) to gimbal. Remove arm post from arm, and attempt to insert the 6 inch post on the J-bracket into the loosely clamped arm. Mill arm post a few ten-thousandths if it still sticks, and buy new arm post from CP as the thin post can't be used in high mode anymore. Consider staying in low mode forever, as docking rig and removing post from arm often is troublesome. Add insult to injury when going back to high mode and discovering that you can't locate the old arm post.

The new way. Get rig into low mode, and, as part of the process, attach the F-bracket to the gimbal (pin and clamp as before). Balance the sled on the light stand with F-bracket attached. Using the post already in the arm, undock and dock sled as in high mode.

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**Caveat: The F-bracket assumes you are using a short arm post (5-6 inches long) that sticks up from the arm about 1 and 1/2 inches.**

Advantages: One extra time-consuming step is eliminated when going from high mode to low mode, undocking and docking is easier, the arm post is more secure (as it is always clamped), and the arm post is unlikely to get lost. The F-bracket can also be grasped securely and comfortably. The added upper section makes an ergonomic handle that may even reduce the fatigue of operating in low mode!

Caveat: The F-bracket assumes you are using a short arm post (5-6 inches long) that sticks up from the arm about 1 and 1/2 inches. This allows the F-bracket to sit on the end of the arm at the same height as the J-bracket. A longer post would raise the gimbal relative to the arm (and lowering the gimbal relative to the arm is the whole point of using the J-bracket in low mode). The longer, 9-inch standard post could be dropped so that only 1 and 1/2 inches sticks up from the arm, but then the bottom of the post would stick down excessively far and interfere with the sled, again defeating the purpose of the bracket.

Perhaps some hard line J-bracket aficionados might still hold out for "low high-mode" operating, a trick the obsolete J-bracket does nicely. But so can the F-bracket, by simply dropping the 6 inch arm post.
Prototype awaits further machining and anodizing.

1 and 1/2 inches and attaching the F-bracket to the bottom of the arm post with two allen screws (as the J-bracket is now attached to its long post).

If you take the trouble to make one of these up, please call Francois and Dan and send them an extra one for their idea. Soon they’ll be inundated with brackets and not want another, but for now, ante up.

Francois’ number in Quebec is (514) 492-8734. Dan’s number in New Jersey is (201) 783-3158.

F-bracket in low high-mode. Note that 6 inch arm post has been dropped an inch and a half.

Association Notes

Rentals and referrals up

Kathy Bowles reports that there have been 148 referral requests since March when she started working with the SOA. We now have 162 active members of the Association, 60 associate members, and another 50 receiving the newsletter.

Garrett and I have proposed to Nicola Pecorini and the European SOA that we rebate half of the European members’ dues to support a phone line and advertising of the ESOA in Europe. The ESOA also would get the lists of operators from our database.

ESOA ops would still be referred for jobs that come through our office (as would the rest of the members be referred to producers in Europe) and receive the newsletter. It’s our belief that a phone number and fax database service in Europe should be the first priority for the ESOA.

Nicola wants to remind everyone that the fax number for the ESOA is 39 2 5521 1029, Attn: Gaetano.

It’s always been part of our long-range plan for the SOA to have a few "satellite offices" around the world. These offices should operate as independently as possible from the office here in Philadelphia.

As an example, if the Australian and Asian members want to get together and can find a way to support a phone, fax, and someone to answer them, we will gladly supply them with database support and rebate half of their dues. A phone and a fax would give producers at least a regional venue for information about Steadicam operators.

At this time, there aren’t enough members to support one "stand-alone" office with a full time staff in Philadelphia. Long before anything like that happens, several satellite offices should be set up around the world to better serve our current members.

In the meantime, we feel that the membership dues for all our members across the board can be reduced. The new rates will be in effect at the time of each member’s renewal.

| Active members: $150 |
| Associates: $100 |

Our ability to reduce the dues stems largely from the successful rental of the Steadicam gear and accessories loaned to the Association. Over $5,000 in rentals has been collected so far.

This letter just in from Tass Michos:

October 27

A quick note to let you know how well the SOA and Videosmith rental backup program works.

Back in March my Steadicam vest, arm, and batteries were stolen from the camera truck on the show "New Jack City." Kathy at the SOA had another vest, arm, and batteries on the set within three hours of my phone call. Cinema Products also deserves praise for shipping me new gear the next day.

Yesterday, the day before I was to start a new show, both of my fastchargers went down. Although I immediately ordered two more, Kathy once again came to the rescue and "FedExed" a back-up to me.

Thanks for the great work.

Regards,

Tass

This is just one example of how Garrett and I hoped the SOA rental gear would help our members. My thanks to Kathy Bowles who really makes the day-to-day operation of the Association work.

Add to your list of items that the Association rents: a short EFP vest.

Jerry Holway
ARRI BL LOW-MODE BRACKET
Lightweight design allows multi-positioning of Universal dovetail plate (not included), clamps firmly to handle of BL-I, II & III. Must be used with eyepiece videotap. Will not work with BL-IV, for which low-mode is not recommended.

Price $250

ARRI III LOW-MODE BRACKET
Ultra-low profile, lightweight for both converted Arri mags and "Steadimags." Unique slip-on dovetail design mounts instantly on any camera. Includes one 1/2" servo motor support rod; does not include Universal dovetail plate.

Price $800

VEHICLE MOUNT & TRIPOD ADAPTER
For vehicle and tripod mounting. Holes for left or right side mounting of socket-block (included), U-bolts for rail mounting, Mitchell base adapter for High-Hat or dolly mounting.

Price $950

Bottom view: Mitchell mount, quick mounting flange & tightening screw.
GIMBAL POST CLAMP
Clamps onto 5/8" arm post; allows post to rotate more freely in arm during positioning and switches.
Price $25

DOCK CLAMP
Clamps around center post, helps stabilize rig and prevents wear and tear on center post and gimbal.
Price $45

DOCKING BRACKET
Aircraft-type quick release pin. 5/8" stud for on-stand balancing, and hook for keeping support arm safe and within instant reach.
Price $250

2" WRAP GRIPS
Textured, non-slip surface gives better grip, one screw to quickly adjust or remove.
Price
5" for High-mode $125
2" for Low-mode $100

PAG MICROMASTER CHARGER BATTERY DOCK
Mounts in minutes on top of charger using existing tapped holes and connectors. Rollers guide battery to charging pins quickly and accurately eliminating clumsy cables. Low-profile adds only 3/4" to charger height.
Price (for single charger) $100
(for dual charger) $200
added to the electronics module to compensate for the heavier camera, and a non-EFP vest should be used.

The vest comes in two sizes, long and short. Short seems to be best for most people. The quick release is a soft velcro device which works reliably and easily, and the vest is unlikely to separate unintentionally.

**Advanatges**

The EFP sled weighs about five pounds less than the 3A sled. When working with light cameras, these five pounds can be a significant percentage of the weight. For live video shoots and other extended endeavors, the savings in weight can be a godsend.

Most of the sled weight is concentrated close to the center post, which allows the operator to make very quick pans and gives the EFP a "hot-rod-esque" feel. This inherent "quickness" can be exaggerated in the tilt and roll axes by compressing the center post fully.

The EFP's sled has a smaller wind shadow than a 3A, which makes it easier to muscle in a windy situation, such as working off the back of a motorcycle at high speeds. I rented an EFP to shoot a bicycle race (156 miles long!) and felt that my work was both better and easier than it had been the year before when I shot the same race with my 3. If you're operating in sustained winds of 20 miles an hour or more, the EFP is the sled of choice.

The EFP sled consumes a lot less electricity than the 3A or other green screen models; the brick battery seems to last forever.

The arm has the 37 lb springs, which work better with most video cameras than the heavy arm springs supplied with the 3A. (SOA active members can always rent a heavy or light arm if needed.)

The vest, while seeming stiff at first, got more comfortable as it was broken in. It comes in two sizes, a real lifesaver for short-waisted folks. Its soft-velcro-back quick-release is simple and positive. The vest spar is easily adjusted via two clamping screws in the middle of the spar, and there are no interlocking ridges to wear out as in the previous vests.

Price. It's about $20,000 less than the 3A. One heck of an advantage.

**Disadvantages**

The primary drawback of the EFP is the black and white LCD viewing screen. Although it saves weight and power, it simply can't deliver as clear and bright an image as the green screen models. For many situations, especially when working indoors with a video camera, the screen is perfectly okay. When the quality of the image delivered to the screen is marginal (via a video assist in abysmal conditions), the image suffers greatly.

Surprisingly, the image quality in bright sunlight is increased if the sun is allowed to strike the surface of the monitor screen. As long as the sun doesn't directly reflect into your eyes, the image is brighter. I generally remove the sunshade, which also allows me to view the screen at a greater angle.

I was able to view the new color monitor at SMPTE in New York, and it delivers a better image from a wider angle than the black and white monitor. CP has also recently tried a
“Hoodman” to improve viewing the image in the sun. I suspect that the image would be blocked not only from the sun, but from the operator during most of the shot.

The quick, hot-rod-esque feel of the EFP can also be interpreted as instability. The sled is a smaller, more compact mass that has less inertia than the 3. This quickness is especially evident in the pan axis.

The "elegant" feel of the heavier models is reduced, and novice operators, while appreciating the lightness, may not be able to make liquid moves as easily.

"The EFP’s sled has a smaller wind shadow than a 3A, which makes it easier to muscle in a windy situation, such as working off the back of a motorcycle at high speeds."

The fore-and-aft adjustment of the sled is quite limited. Perhaps surprisingly, that little LCD screen has a big effect on dynamic balance, and shifting the battery all the way to the rear does not fully compensate dynamically. Whip pans are a little reminiscent of the Model II.

The vest spar is lighter and more flexible than the 3A vest spar. It twists under heavy loads or strong moves. The EFP vest should not be used with camera/sled combinations that weigh more than the lightweight arm can lift, i.e., 38 pounds. Caution is advised when approaching this weight limit and/or making moves with strong accelerations, having the unit far from the body, etc. Be sure to check the screws that hold the two retaining rails in place. If they back out, the rails will break under load.

Lastly, on the spar of the long suit, the attachment points for the chest straps are too low and provide insufficient support under heavy loads.

Some minor complaints

The video outputs and inputs are "looped through," even though the exterior markings, video in and video out, might lead one to believe they were isolated from one another.

The frame line generator interferes with the monitor image (to varying degrees, depending on which EFP and monitor you are using). I wish that the generator didn’t interfere with the image, or at least that one could shut it completely off.

The fancy, spring-loaded rachet knob that locks the horizon of the monitor screen is difficult to use. Because the screen needs to be shifted only when going to low mode, I think the rachet should (at a minimum) be replaced by a regular old 10-32 hex head machine screw.

I must admit I’m not a fan of the design of the J-7 zoom control. It works, but I find it uncomfortable to use. A lot of bulk in the J-7 arises from the video on-off switch which I feel is unnecessary. Why not just reach up and turn the camera on and off? What I’d rather see with the J-7 is a focus pot connected to a small, inexpensive hardware controller. If you’re going to zoom, you ought to be able to focus, too. (I have such a gadget at home that has both zoom and focus controls in an ergonomic arrangement.

Junction box, rear

The EFP also adds the next chapter to the CP/Seitz electronic connector configuration feud. To be expected, the 9-pin DIN connector for the radio focus receiver must be reversed 180° degrees to accommodate the Seitz receiver. Additionally, the support system must be remade and extended, not just filed out and reversed as on the 3A.

"To be expected, the 9-pin DIN connector for the radio focus receiver must be reversed 180° degrees to accommodate the Seitz receiver. Additionally, the support system must be remade and extended, not just filed out and reversed as on the 3A."

stop and 2 = shield for same. Pins 3, 4, 6, and 8 are the same. Pin 5 now controls lens 3 and pin 9 lens 1 (they have been reversed), and pin 7 has no connection. The WRC receiver now uses pins 1 and 2 for camera on/off while the Seitz receiver uses pins 1 and 2 for lens channels 4 and 5.

Perhaps more aggravating is CP’s use of HRS connectors on the EFP with different pin outs than those pioneered by Seitz. On Seitz’s connectors, 1 = ground, 2 = video, 3 = video ground, and 4 = +12 volts. For CP’s HRS connectors, the power pins are the same but the video connections are reversed. One may argue that CP is under no obligation to accommodate Seitz equipment, but many of CP’s customers who will use and rent the EFP already own the Seitz accessories. Alas.

Other issues

There were fears expressed in the "Grand Survey" (Vol. 1, #4) that an inexpensive Steadicam would undermine the ability of green screen owners to get a fair rental for their gear and at the same time, flood the market with novice (again, inexpensive) operators, and that producers wouldn’t know the difference between a "real" Steadicam and an EFP. Similar arguments are also made between 3 owners and 2 owners and 1 owners and owners whose mods and accessories already make differences incomprehensible to producers.

However justified our fears of the new machine ruining the market, I feel that there is a silver lining in the expansion of Steadicam models, and there are some positive steps that we can take to mitigate the confusion or disruption of the marketplace.

EFP continued on page 10
general, I believe that Steadicam owners should be alerted to the possible dangers and, considering the uncertainties as to what represents an acceptable level of ELF, should prudently minimize close exposure to the CRT's, particularly color ones. Try to leave the Steadicam monitor turned off if it isn't needed, especially when resting between takes. In other words, don't lounge around wearing the gear between jobs! Incidentally, Jerry Holway and I have taken readings independently on behalf of the SOA with the digital ELF meter I bought from Safe-Computing Corp., and we came up with nearly identical measurements to those obtained by CP.

This meter (and another digital meter which I bought at the same time from Walker Scientific) will be cross-checked for accuracy and will become part of the rental inventory available at low cost to active members. The Safe-Computing one is easy to use and reads directly in milligauss on an LCD screen. A small tape measure is attached to the meter to make distance-calibration of your readings easier. I urge you to check your own equipment and read Brodeur's article on monitors in Macworld, July 1990. If you want more info, read his book, ominously titled Currents of Death (Simon & Schuster, 1989).

If you take the trouble to rent one of our meters, you should also consider checking your residential and business spaces at the same time. ELF radiation from power-transmission lines and substations has been particularly implicated as a health risk. You may be interested to know that in a sweep of my own country house I got extremely high ELF readings over an entire section of my ground floor which was eventually traced to a wiring loop of semi-rectified low-voltage feeding a long string of outdoor walklights. I have since taken steps to move this wiring away from the house, as the levels I found were as high as those implicated in certain increased incidences of cancer. I am not overly worried about the consequences, because this is a weekend residence and our exposure was limited, but it makes sense to check and take minimal precautions, since, as Brodeur points out, "such [regularly oscillating] electromagnetic phenomena... have no counterpart in man's evolutionary history."

If you have obtained the "mu-metal" sprayed shielding from Seitz Technical, be advised that, although it may be helpful against RF (radio frequency) radiation, our direct measurements (with and without covers) indicate that it does not seem to reduce ELF radiation. I suggest that you make your own measurements if you rent our meter and consult with Seitz on the matter.

Ed. note: The ELF magnetic radiation meters will be in the rental inventory of the SOA (for active members only) and can be obtained by calling Kathy at (215) CALL CAM. Price: $5.00/day plus shipping.

Some interesting numbers: A constant exposure of 2.0 milligauss has been correlated with increased incidence of various cancers in several studies. An electric heating pad in my house gives off 22 milligauss (at 0 inches); the PAG charger, 12 milligauss at 4 inches; the 650 watt microwave, about 15 milligauss at 12 inches; a Radius full page display B&W computer monitor screen, 0.9 milligauss at 12 inches; and a 19 inch color TV, 4.5 milligauss at 12 inches.

Because metal shielding has no substantial effect on ELF radiation, there is nothing one can do to reduce exposure to ELF radiation except to move away from the source. Model I and II monitors, although encased in an all-metal housing, give off the same ELF radiation as the Model III monitors.

See Paul Brodeur's articles in the June 12, 19, and 26, 1989, and July 9, 1990 issues of The New Yorker.
In light of the current concern of potentially harmful health effects of ELF radiation from computer monitors, it was decided to test the high-intensity video monitor for the Steadicam IIIA to see if it emitted ELF radiation at a level that may be considered potentially harmful. A recent article in the July 1990 issue of MACWORLD magazine lists test results for 10 color monitors.

**Test conditions**

In order to offer the closest basis for comparison to the testing performed by MACWORLD, our testing was performed with the same ELF measuring device, a Holaday HI-3600-02 ELF/Power Frequency EMF Meter. Ambient ELF radiation as seen with the ELF meter oriented at ninety degrees to the fluorescent lights, which is how the test data was taken as this minimizes ambient influence, was 0.14 milligauss. When the meter was oriented so as to point directly at the lights, the ambient radiation as seen by a person standing below the lights was 0.5 milligauss, maximum. Test data was taken at 4, 12, and 28 inches from the front, back, top, bottom, and sides. Beyond 28 inches any reading taken was at or below the ambient reading of 0.14 milligauss.

**Test results**

The diagram shows the axes along which the readings were taken and the values obtained at the three distances. It was reassuring to note that our monitor does not come close to emitting the ELF field intensities that a color computer monitor emits. The highest reading obtained was 7.00 milligauss at a distance of 4 inches from the left side of the monitor. This compares to 11.58 to 67.75 milligauss for the same test performed on the color monitors. At 12 inches, the two side readings of 1.14 (left) and 1.00 (right) were the only readings at or above the 1.00 milligauss level. At 28 inches, no reading higher than 0.26 milligauss was observed at any angle. Remember that this level is less than was observed being emitted by the overhead lighting.

**Conclusion**

While at this time no guidelines for ELF radiation exposure exist, it is reassuring to know that the Steadicam IIIA monitor presents far less hazard than a color computer monitor, and in most cases less than overhead lighting. This is due to the high-quality yoke used on the CRT, chosen for the excellent picture quality it provides.

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In the Next Issue

The long-awaited translation of Bernard Wuthrich's "Three cameras on the Steadicam!" Other pending articles include shooting in 3-D, strengthening the arm for heavy loads, a report on the new five amp hour batteries, and improving video transmitter performance with proper antennas. Plus much more!!
The silver lining theory suggests that if CP is healthier by selling more JR's and EFP's, they will be better able to support the top of the line models and operators. There is already some evidence to suggest this is happening.

When talking with a new client, I always mention that I have radio focus control and other accessories necessary for the job. If I have to rent additional equipment, such as long throat mags, I let them know I can get the necessary gear and how much it is going to cost. I don't mention any "deficiencies" in my gear irrelevant to getting the job done, such as not owning a Model III vest.

If the producer then chooses another (inexpensive/novice/EFP) operator who shows up on the job without a focus motor system, the proper lens gears, or low mode accessories, then I figure the producer wasn't paying much attention to what I own or had to say.

As a green screen owner (Model III prototype, heavily modified), I certainly hope the EFP doesn't undermine my investment. I know of one new operator who is rented an EFP and shot the World Series in October. I suspect he is opened a new market rather than stole the job from someone else. I believe the EFP will allow lower budget productions and markets to experiment with the Steadicam. With time, both the limitations and advantages of the EFP will become known. More work should also mean better work, as producers become more familiar with the tools and with the operators.

For sale: Steadicam Samurai – Fully biffed, tweaked and meticulously maintained Arri IC with four different hardfronts that accept any lens mount, even Panavision. CP flatbase with DeRose variable speed motor with special setting for HMI balance. Russell low mode bracket, videotap with cinevid camera. 2 long throat magazines. West easy access


For Sale: Model I & II Spare backup parts. Gimbal w/ Russell handles (w/ low mode), just serviced, $485 (list $900). DeRose battery mod unit, $560 (list $900). 36-41 lbs adjustable green springs, full set w/ cables and parts, $700 (list $3,000). Fore/aftr camera platform w/ new gears, $265 (list $432). DeRose telescoping main post w/ clamps, new, $60. Monitor bracket w/ accessories, $60. (list $141). Arm hinge (elbow) $250 (list $420). Arm connecting pin unit, $285 (list $650). Also Model III fore/aftr rotating adjustable plate for electronics module w/ lower post, clamp $385. (213) 372-1493.

For Sale: Steadicam II, heavily modified w/ III gimbal, DeRose battery housing mod. w/ brick battery holder. Also monitor bracket and wrap grip, Seitz frame line generator, extra XLR's and connectors for transmitter, etc., switched for flipping picture for quick low mode, adjustable 51 lb Model II arm with quick release pin at base, 2 re-celled batteries, 2 chargers, vest and case. A well-maintained unit, $22,000. Also Steadicam II w/ standard 39 lb arm, vest, 2 batteries, 2 chargers, 2 shipping cases, good condition, $17,000. With CP quickcharger, $18,000. Call us with all of your Steadicam needs. We are dealers for CP, PAG, Seitz, Coherent, and Russell. Call Derrick at Whitehouse AV (805) 498-4177 or Fax (805) 499-7947.

For sale: Low mode bracket for BL 1, 2, or 3. New. Multiple holes for balancing, $350. Call Michael Meinardus, (818) 768-7712.

For Sale: SONY BVW 3A Betacam with Fujinon 12x9mm lens, single owner broadcast standard camera, in good condition. Some accessories available Can $14,000. obo. (705) 674-4345.

For Sale: New for the Steadicam. VR-1 from Holtron Industries, designed by Steadicam operators for Steadicam operators. The VR-1 is designed to save you weight and space and to eliminate the use of awkward Y-cables on your Steadicam. The VR-1 powers the camera, video tap and video transmitter from a single camera battery. The video transmitter and video tap outlets can be independently switched on or off. The video tap can be switched to 9 or 12 volt operation. Both outlets are individually filtered and regulated to eliminate camera motor noise, and they help prevent circuit damage from the high voltage of overcharged batteries.

The battery direct outlet is also filtered and features a battery level indicator which can be switched on and off. The VR-1 is fully grounded, and the 4-pin XLR is standard on all outlets. If your camera power cable is properly grounded, you will not need the extra mini-clamp line to ground the camera to the Steadicam. The VR-1 has been field tested in production with virtually all 35mm camera systems. The tests were done over a ten-month period by R&M Camera Specialties allowing potential "bugs" to be removed from the VR-1. The VR-1 lists at $535 and carries an 18-month warranty. For information contact: Holtron Industries/Tim Holly (213) 450-0400, or R&M Camera Specialties/Mike Meinardus (818) 768-7712. VR-1 Copyright 1989/1990 Holtron Industries, PatApPend.

Innovator at Head of
Cinema Products

Jac Holzman, 58, was the founder, chief executive officer, and creative head of Elektra Records (1950) and Nonesuch Records (1964). In 1970, Mr. Holzman sold all of his music interests to Warner Communications, Inc. and continued his association with the labels he created for three additional years. While a part of the WCI music group, Mr. Holzman helped to establish both the WEA Distributing Group and the WEA International Records Group. Among the artists he has produced or discovered are: Judy Collins, The Doors, Bread, Carly Simon, Harry Chapin, and Queen.

In 1973, Holzman became Senior Vice-President of WCI and is the company’s Chief Technologist. He co-wrote Warner’s business plan for early entry into the home video field and into interactive cable (Qube).

From 1972 to 1982 Mr. Holzman was also a director of Pioneer Electronics, Japan, and as Senior Consultant to Pioneer, made a significant contribution to Pioneer’s early adoption and later successful implementation of LaserDisc technology.

In June of 1982, Holzman assumed the Chairmanship of Panavision, Inc., a wholly-owned subsidiary of Warner Communications. Panavision was in financial trouble, but in two and a half years under Holzman’s leadership, became a substantial cash generator. Panavision’s value more than doubled, and in the spring of 1985, the company was sold for in excess of $56,000,000. While at Panavision, Holzman introduced an advanced system of 16mm cinematography designed so that the progressive features of this system could migrate into the camera that eventually became the Platinum Panaflex. Under his stewardship, Panavision began a totally new program of optical design which resulted in the acclaimed Primo series lenses and inaugurated a comprehensive management information system to track the whereabouts of rental equipment throughout the world and to determine the ROI (return on investment) on each rental item in Panavision’s considerable universe.

In September 1988, Jac Holzman and a group of investors led by him, including John Backe, former President and Chief Executive Officer of CBS, Inc., acquired 100% of Cinema Products from Ed DiGiulio. Working with Ed, who continues as President of the company and head of R&D, Jac and the CP staff are committed to developing a range of new products based upon the Steadicam® technology. Recently launched was the Steadicam® EFP which has met with resounding success at television networks, video production houses, and rental houses, Sales have far exceeded the company’s expectations. In addition, the launch of the Steadicam® JR as CP’s first high-end consumer-oriented product is likewise a success, receiving rave reviews from both customers and the technical press. In addition, CP has completed the development of a family of Keykode™ products and a newly engineered wireless remote control with amplifier as well as working on a number of other products to enhance the Steadicam® family.
Accessories, modifications, and upgrades are sprouting up all over the map. Here's just a few we've heard about.

From Riki Burks comes a “universal” lens gear set that can be quickly mated to any lens. Riki’s helical gears are made of delrin for a more positive and quieter response. For more information, call Riki at (201) 287-3626.

Bob DeRose has a host of new accessories and mods - even more than are advertised on pages 4 and 5. Of particular note is the low mode brackets for the Arri III and BL III.

Ted Churchill has an interesting line of T-shirts which will make nifty Christmas presents for your friends in the industry. (212) 691-0536.

Maybe the hottest modification going is reworking the heavy (54 lb.) arms to reduce the flexing that is apparent when working with heavy loads. John Seitz has modified a couple of arms by strengthening the U-shaped parts at the end of each arm. On the other coast, Cinema Products, in response to a suggestion by Mark O’Kane, is reworking the upper arm. CP found that, under heavy loads, the “dogbones” in the upper arm flex slightly out of square. Their mod will be to replace the dogbones with 1 and 1/2 inch diameter titanium tubes.

More on this in the next issue of the newsletter.

Also from CP is Sony’s 8mm VCR and an adaptor to mate with the Steadicam. This is the transport that is found in the TR4 cameras, but without the camera, viewfinder, etc. It is simply the smallest and lightest VCR out there, and it works like a charm. The adaptor unit supplies the 6.5 volt power and stereo sound (!?) without modifying the VCR.

Other toys from Cinema Products include the new color monitor for the EFP, a B&W LCD back-up monitor system for the 3A, a dual battery adaptor for the EFP, a universal low mode handle clamp for video cameras, and a new JB-4 junction box which interfaces their new amp and WRC-4 receiver for use off of the Steadicam. Finally, if your camera is too light, CP has a 7 1/2 lb. steel adaptor plate. Part number 078-4163.

About the fore-and-aft plate of the electronic module
When balancing the Steadicam 3A, especially in the low-mode configuration, the locking knob of the electronic housing and the adjustment knob of the fore-and-aft plate tend to touch which doesn’t help that operation. Actually, there’s a bit of play between the electronic module and the plate. This play can be easily removed by adding a simple slice between the two parts.

About the side-to-side plate
It may occur that the side to side plate becomes very difficult to move. Before your fingers become totally worn out, you can do two things to help. The first one is to (slightly) oil the long white screw under the side-to-side plate. In fact, this will probably not be enough. Actually it seems that the precision in the side-to-side plate construction is not that good (think! how expensive would a Steadicam be!!) and the alignment between the screw and its support (on the side of the plate) may not be absolutely correct. The solution is to slightly unscrew the two hex screws of the little support. It will really work!!

Bernard Wuthrich