

## Master Series Steadicam to Debut at NAB

*A report from Garrett Brown*

I'm happy to announce the long-awaited introduction by Cinema Products Corporation of the new *Steadicam Master Series* (a.k.a. the Model IV) at the NAB Show in Las Vegas beginning March 21.

The Master Series is the first top-to-bottom new design since 1976, and it's the most user-friendly Steadicam ever, combining a number of patent-pending new inventions with newly available technology and materials to help us shoot better, faster, and with greater ease.

Cinema Products Engineering, Sand Lake Design of San Francisco, and I have worked on this project for two years, and we are extremely proud of the results.

Two models will be shown at NAB, and production will begin immediately thereafter. We will host private hands-on sessions for operators in Los Angeles and New York in the weeks following the show.

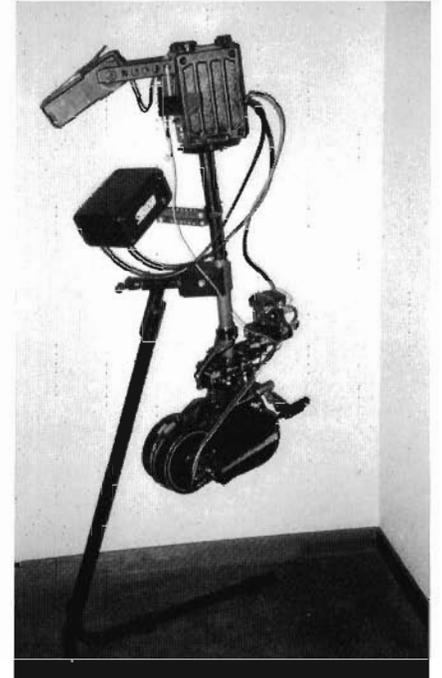
The Master Series was designed with input from Steadicam owners on

both coasts and in Europe. The monitor, stage, gimbal, sled, arm, suit, and power system are all new, and each component has several revolutionary features which, combined, represent a major technical and ergonomic advance.

I believe that the Steadicam Master Series will permit good operators to surpass themselves and great operators to push the envelope to an even higher level of precision with increased flexibility and comfort.

Speaking as one whose career has spanned the 20 years since my original prototype, I can't wait to get my hands on it! At a stroke, it will demolish a dozen or so of the problems and absurdities that have vexed us since the beginning. If you can make it to NAB, we will be pleased to show you personally what this means. If you can't, try to attend one of the private showings or watch for complete specifications and pictures in the May edition of the *Letter*.

*Garrett Brown*



Non è barzelletta, è magnifico!  
Anche, non è dinamico...

## Nicola's Solution

Since I bought my first Steadicam back in 1980, the "docking solution" has always been a major issue. The docking devices offered by CP constantly presented some problems and limits, from the original Model I docking stand through the latest telescoping model. The last is quite an amazing piece of equipment, with more clearance from the stand than earlier models (but still not enough for certain configurations, especially heavy cameras in low mode), a good trimming post, the hook for the vest, and a safer and quicker retaining pin. It's also totally overpriced – I don't remember the exact amount, over \$600, but since that was for the "hook" alone and a good light or C-stand goes for \$100 to \$300, the total price is up to almost \$1000, more than a Heden motor! – and still without enough clearance.

All experience the problem of  
*Solution continued on p. 3*

### SOA Workshop

The next "Philadelphia School" SOA Steadicam workshop will be held the week of May 15, 1994. Great instruction, great facility, great contacts.

Call Kathy at 215 225-5226 for more details.

### Next Newsletter

May issue to follow soon. Alas, for this issue we only had enough material on hand for six pages, and we must print in multiples of four... Coming: More information on the Master Series, along with articles on Brant Fagan's ABC plates, inexpensive video glasses, the first article from our roving reporter, and Super Skyman.

# Rickshaw for Two Bits



Robin flies. Note small rope beneath his left foot, designed to help the actor remain at set distance from film plane.

During preproduction for "Two Bits," with cameraman Juan Ruiz-Anchia, I was presented with a challenge. How to run at full throttle ahead of an energetic twelve year old boy, shooting backwards in both underslung and normal modes, through an art-directed alley that would vary from 35 to 21 inches wide? Just to make it really fun, occasional obstructions of a practical location would be thrown in. We agreed there would be cuts breaking up the scene to release me from the narrowest parts of the alley. I would cruise the sections averaging 27 to 29 inches. There was plenty of room for the boy to run, and it was visually tight for the director, but it was into the arm-scraping, mattebox knocken-offen realm for the operator.

I felt that body-mounted operation was impossible, as I discovered I needed 31 inches for running. Additionally, the camera position would be limited to one side of the alley without the option of a center shot. It was clearly a rolling rig shot,

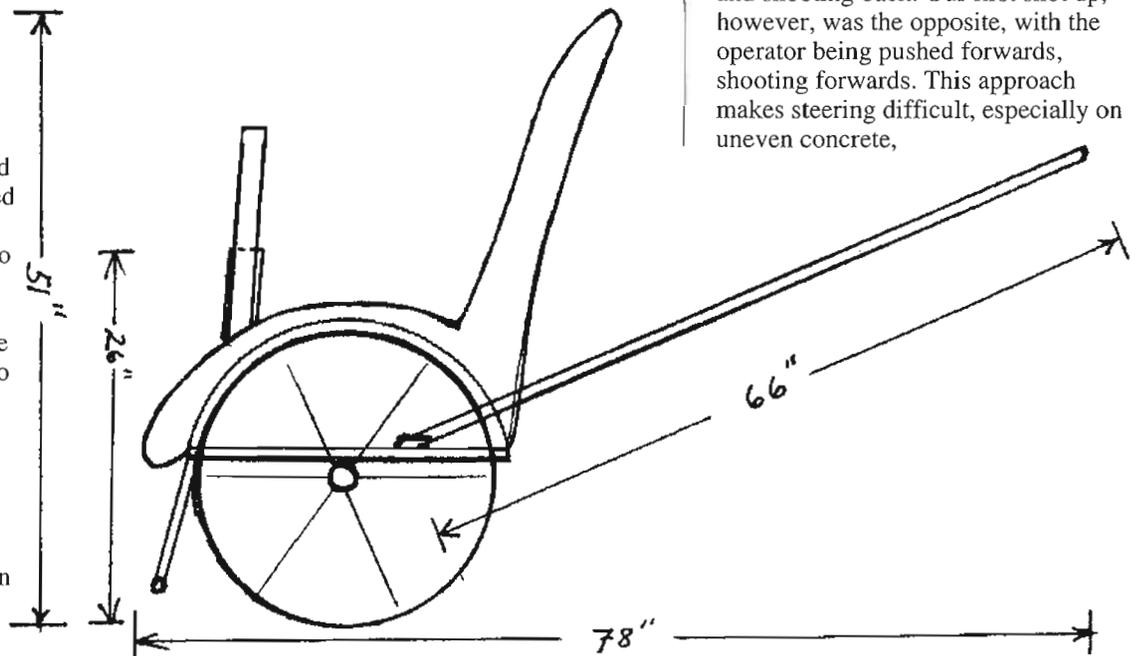
but the first two options that came to mind, the western dolly and the wheelchair, weren't feasible to navigate at speed on uneven pavement through such a narrow passage. Time for a fresh idea, so I called Garrett.

We considered three-wheeled bicycles, multiple-skateboards, Skyman, and two variations of hovercraft (sync sound precluded both). By the second phone call, Garrett had envisioned a two-wheeled rickshaw rig; within a week, thanks to Garrett's diligence and Ed Quay's expertise, it was ready for tests.

***"but it was into the arm-scraping, mattebox knocken-offen realm for the operator."***

The rickshaw consists of a molded plastic seat with an arm mounting post fastened to an axle with two bicycle wheels, a simple footrest, and a five foot yoke. The navigational theory is that if your "coolie" (dolly grip) can run the 25 inch wide yoke through a narrow passage, the 25 inch wide wheelbased rig and operator will follow with little thought towards steering. Camera tests proved the theory sound.

The design calls for the coolie to be running inside the yoke pushing on the handle, but essentially pulling the operator who is moving backwards and shooting back. Our first shot up, however, was the opposite, with the operator being pushed forwards, shooting forwards. This approach makes steering difficult, especially on uneven concrete,



## Classifieds



Where no man has ventured before?

minimize width (as Garrett described in the last newsletter), we raced through the alley.

Dennis Wilson had to think more of maintaining a fixed height of the yoke at his chest than of steering, and I had to banish thoughts of whiplash and mag imprints on my jaw as I framed the shot.

In truth, the rickshaw made the shot so easy that we were obliged to add an abrupt stop and hold the frame when the boy stopped at the end of the alley to look down the street. This meant building a ramp off the sidewalk into the street, and it gave Dennis the challenge he deserved. He earned a round of applause

but it did allow for the camera to be three inches off the ground and centered in the alley.

Uneven surfaces are rougher and influence vertical trim for the arm more than on a desert dolly. Perhaps this is due to the narrow wheelbase and/or the two-wheeled nature of the design. Fortunately, the dailies showed a more controlled shot than the riding experience predicted.

Once we switched to moving backwards, shooting back, the rickshaw performed exceptionally well. With the arm "criss-crossed" to

for five consistently good takes. Credit must also be given to Mike Fauntleroy pulling focus from second floor windows... sharp even with the 100mm lens.

The rickshaw may be available for rent from our association, and it disassembles, allowing it to fit into several cases. If you anticipate a need for it, please give Kathy enough time to round up some containers. Its shipping weight would be about 45 pounds, plus the cases.

*Robin Buerki*

### *Solution continued from p. 1*

having the Steadicam sitting there relying on its own weight and balance to stay in place, straining the gimbal (so one adds a ring, etc. etc.). Same old story, you buy something for a lot of money, and then you start modifying things.

Last year I finally bumped into "the solution" – at least for me: a bicycle repair stand! It's a brilliantly designed piece of equipment sold in any serious bikeshop. There are various brands and sizes, but they all feature great advantages.

Sturdy and solid, they self-stabilize, and there's plenty of clearance, even for Vistavision in low-mode. The stand clamps onto the centerpost with an adjustable sprung clamp about four inches long,

providing an excellent hold and no strain on the gimbal or post. The clamp swivels 360° so you can work around lenses, mags, etc., without having to hold the sled from swinging. They look slick, and they're cheap – \$90 to \$200!! And they are much easier and handier to customize (just to keep up the habit...).

Alas, they have some disadvantages: You can't use them on very rough terrain (but grips love to help you). They don't fold nor fit into regular cases, so it's one more thing to carry or ship (personally I have 12 cases; one more can't kill me). And they cost so little that if you buy equipment just to write it off taxes, they are not a good investment.

*Nicola Pecorini*

**For Sale:** Panavision Video Tap, fits on viewfinder of Gold and Platinum. For any c-mount camera, rotating base, focus/iris control, \$2,500. Also CCD video camera w/ auto/manual iris gain, 1/1000 shutter speed, and infrared switch for very low-light situations, c-mount, small and light. 2 cables, case, \$1,500. Model II Steadicam Sled case, good condition, \$100. Model II CRT monitor tube, good condition, \$200. Low-mode cage, three sets of posts, slotted for easy mounting, \$430. WRC-4, 4 channel wireless servo-control system, excellent condition, just tuned up. Complete set: 4 channel transmitter and receiver, CP motor amp, 4 lens rings, 3 batteries (plugs into battery belt as well), two chargers, extra cables, case, JB-4 junction box system for use off Steadicam (hand-held, cranes, etc.) \$5,300. Lists for \$8,875. Call 310 372-1493.

**For Sale:** Model III Steadicam with 5 batteries, telescoping main support post, Seitz internal receiver, main mounting assembly with side-to-side plate, J-box with two video outs, amp bracket, assorted dovetail plates, Seitz fore and aft connection at electronics module end, moveable battery system, monitor support bracket, DeRose handgrip. Unit also has Seitz installed plug for 24 volt converter system and video playback switch. Monitor cables have been extended on this unit, and has all of Seitz electronic upgrades and electronic protection features. Included is 8mm on-board recording deck. \$17,000. Bob Ulland, 813 294-7274.

**Wanted:** Used or new VHF Coherent Video transmitter in good condition with 6 pin power and video connector. Call 011 44 71 700 3555 or fax 011 44 71 700 4445 (London). Ask for Philip White.

**For Sale:** One VT-250 Coherent video transmitter, CH 23 with power cable and case. One Sony TU110 TV tuner unit with AC/DC adaptor, made to work directly with Sony 8000 video monitors. Mehran Salamati, 213 874-3158; fax 213 874-0259.

# Another way to get 24 volts

Powering a 24 volt camera with a 13.2 volt Steadicam has always been a challenge. The current three choices are to use an external 24 volt battery with a separate wire strung to the camera, or to have an on-board 24 volt battery in addition to the Steadicam battery, or to employ an on-board DC to DC converter that is powered by the Steadicam battery. All work and have various advantages and disadvantages.

One positive aspect of all three systems is the isolation of the camera power from the Steadicam power supply. With an isolated supply, camera noise is theoretically not transmitted to the Steadicam's sensitive video circuits.

When using an external 24 volt battery, no additional weight is added to the Steadicam, but the umbilical wire to the Steadicam is often annoying and makes operating less precise. The Seitz 24 volt wrap-around battery is a good solution, but it adds a fair amount of weight relative to the power available. The converter option adds less weight to the Steadicam than the 24 volt battery, but 15 to 20% of the power is wasted in the conversion. Also, there is a very heavy drain on the Steadicam battery when the camera is running.

Another (inexpensive) solution exists, again with advantages and disadvantages. One can add a second, smaller 12 volt battery in series with the Steadicam battery to deliver 24 volts to the camera. NP-1S's are cheap, deliver 2.3 amp hours, and are charged by the PAG Micromaster in 20 minutes. The weight is between that of the 24 volt battery and the converter, but the weight to useful power ratio is greatly increased. I've shot eight or ten 400 foot mags with the Moviecam Compact and not needed to change the NP-1S battery. The Steadicam battery is not over-taxed and lasts a reasonable amount of time.

Disadvantages do exist: First, the camera power supply isn't separate from the Steadicam supply, so some sort of noise filtering is required. Secondly, an active safety circuit must be installed to prevent the "bump-up" battery's voltage from accidentally running through the Steadicam "in reverse" when the Steadicam battery is removed or changed. Fortunately, the safety circuit is inexpensive and easy to build with parts from Radio Shack or a local electronics supplier, and it weighs in at 2 to 3 ounces.

How the circuit works:

The safety relay closes and provides 24 volts to the camera only when a Steadicam battery is inserted. When the Steadicam battery's voltage drops below 10.5 volts (or when the battery is removed), the relay opens and the "bump-up" voltage cannot

flow through the camera and "in reverse" through the Steadicam electronics.

Red and green LED's, both powered by the bump-up battery, indicate the system status. The pot and the transistor set the voltage at which the relay turns on and off. A fuse protects everything, and a switch turns everything but the red LED off. The whole thing can be plugged in to an XLR jack, or, to save weight, hard-wired somewhere on or in your Steadicam.

If you don't have a separately fused, 4-pin XLR jack hooked up near your battery with 20 or 18 gauge wire, I strongly suggest you do so for either this option, running a converter, or even powering a 12 volt camera. The wires to the J-box's XLR connector are just too small and the choke further reduces the available power in critical situations.

Jerry Holway

## More Classifieds

**For Sale:** Model IIIA, heavily upgraded, good working condition. Lots of accessories. \$35,000. USD. We are willing to pay half the airfare of a person coming over to check the rig, if he/she buys it. We shall ship overseas. For more details, call Beni Mor in Israel, 972-3-5465001, fax 972-3-5460705.

## STEADICAM Letter

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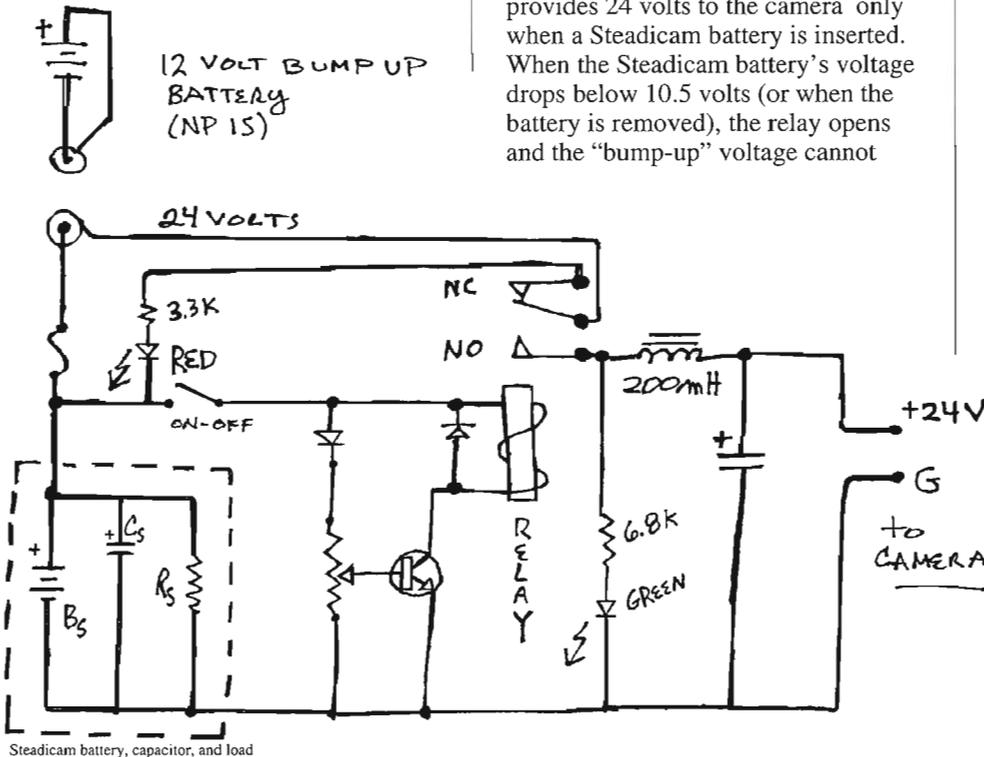
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Steadicam Letter is published in Broomall, Pennsylvania by the Steadicam Operators Association, Inc.

Advertising: Classifieds: \$10 per 100 words for members, \$20 for non-members. Space advertising rates on request.

Subscriptions: Free with membership. For non-members, \$42 per year USA, \$52 foreign.

Membership options:  
Active: \$150 per year, Associate: \$100 per year



Steadicam battery, capacitor, and load