

# On Camera: SAG Puppeteers

## THE MODERN PRACTICE OF AN ANCIENT ART

BY LISA AIMEE STURZ AND MARK BRYAN WILSON

**D**o you remember Yoda in *The Empire Strikes Back*? Johnny 5 in *Short Circuit*? Slimer in *Ghostbusters*? Harry in *Harry and the Hendersons*? More producers are including unusual yet believable creatures in their films today. Who makes these characters move? What performing skills are needed to bring these creatures to life?

A unique group of character actors has emerged within SAG and AFTRA who concentrate specifically on the performance of puppets for camera. Recently, puppeteers within SAG have organized the National Puppeteers Caucus to discuss changes in the industry and address some of their specific and unique needs.

### PUPPETEERING FOR CAMERA

**S**uccessful on-camera puppeteering requires solid theatrical instincts, a high level of acting skills, a flexible voice capable of producing a wide range of characters, a gift for mime, and the ability to bring life to an inanimate object.

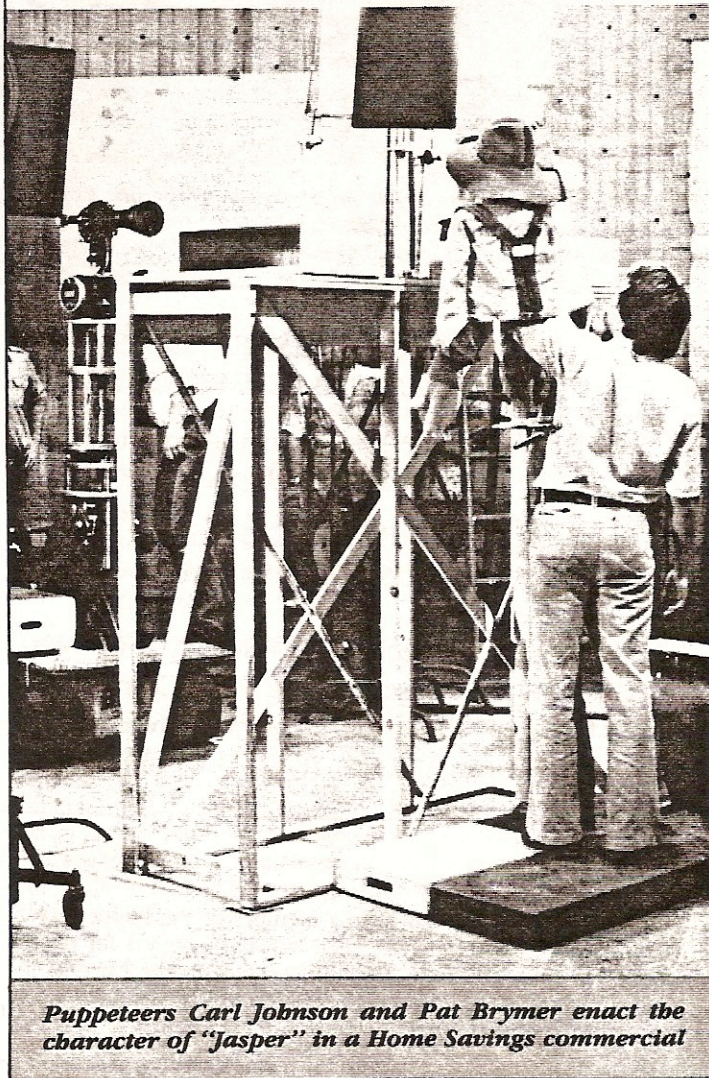
Since the *Star Wars* trilogy revolutionized the use of special effects in motion pictures, new technologies including cables, radio control, pneumatics, hydraulics, electronics, computers and "Waldos" (see story on page 17) frequently replace or augment traditional hand puppets. SAG puppeteers are expected to quickly adapt their theatrical skills to these new methods of puppet manipulation and be able to perform a character built in any style.

One of the film puppeteer's most important tools is the video monitor. The monitor receives its image directly from the camera while filming, allowing the puppeteer to make instant adjustments to the performance. To change the character's expression, the puppeteer will control the subtle shifts in a puppet's angle, height, and eye focus. The monitor usually has a smaller rectangular border superimposed onto the image indicating what portion is being filmed. The puppeteers can watch the area just outside the border to visually help keep their heads, arms, and rods from entering into frame. Some monitors have a reverse scan switch, which flips the image, giving the monitor a mirror-like picture. Working with the unflipped image can sometimes be more difficult, as the puppeteers on a regular monitor are constantly moving in opposition to their own actions. For long shots, when the character's image is very small, the puppeteer might prefer to have an additional video system presenting a close-up image of the puppets. This will allow him or her to more accurately judge the character's position and action.

Close-ups give the puppeteer more freedom to express the attitude of the puppet with small precise gestures, whereas quick movements may look jerky and uncontrolled. It takes much practical experience to attain that perfect balance between too much and too little.

Position and precision are crucial in film. The camera crew needs to know exactly where and when the performer will start and stop so they can focus the lens accordingly. Often there are tape marks on the floor for the performer and coinciding marks for the dolly grip and focus puller. Hitting marks that are on the floor with the tip of your shoes is a tried and true technique for actors; however, hitting such marks in mid-air is very difficult for performers holding puppets over their heads. Tape marks on the monitor can help; but the puppeteer usually relies on the feeling of a movement and memorizes the physical sensation of how far the arm extends or the elbow bends. Placing an auxiliary video camera at a 90 degree angle to the main camera gives the puppeteer a depth reference to help him or her accurately hit difficult marks.

Hiding the puppeteers from camera and choreographing the technical elements of a shot can be more challenging than the actual performance. Puppeteers often assume strange and contorted positions to stay out of a shot: stuck inside a sofa, behind a wall with their arms sticking through a hole, under the floor of the sound stage with their legs in a split, hanging from the lighting



Puppeteers Carl Johnson and Pat Brymer enact the character of "Jasper" in a Home Savings commercial



Hollywood Puppeteers Caucus Chair Tony Urbano works "Birdie" in a McDonalds commercial by Leo Burnett

grid, cramped behind a prop, or flying on a crane. The puppeteer must also avoid the microphones, stay clear of the camera moves, be conscious of where all the cables and electrical wires are, not lean against lights or set rigs, and not cast shadows on the carefully lit scene. Further complicating the situation is the proximity of several puppeteers working together in a small area with an elbow in someone's face or one puppeteer sitting in another's lap. You can imagine the chaos when you add special effects like explosions, sprays of water, piercing gunshots, greasy slime, confetti, flocks of birds, breakaway bottles, thick smoke, hot lights, and stage blood that require puppeteers to wear uncomfortable protective clothing. Even with all these adversities, puppeteers must deliver convincing and accurate performances.

**T**he blue screen process helps to mask puppeteers, rods, strings, cables, and other mechanisms when there is no way to physically hide them on set. This technique involves shooting the puppet against a specially lit color-controlled background with the strings, rods and puppeteer's clothing of the same hue. Separating this color during the film processing leaves just the puppet, which is then composited with a background plate. When these shots are combined with other moving elements, the puppeteer needs to act and react to something that isn't there. Sometimes puppeteers working in front of a blue screen are able to watch the pre-composited scene on a video monitor as they perform. This allows them to relate to objects and scenery that are shot separately.

Rotoscoping is a method in which an artist can look at a film,

frame by frame, and alter a particular portion of each image. This process eliminates unwanted rods or hands that show for a brief moment. In some scenes of *Who Framed Roger Rabbit*, puppeteers helped to establish animation guidelines by manipulating objects and mechanical devices that held objects in the master shot. In recent McDonald's commercials, by using a computer paint-box program to delete the image of the rods, Mr. Potato Head appears to dance freely. This allows puppeteers the freedom to perform without having to worry about hiding controls and themselves.

Most films are shot at twenty-four frames per second. Often a director chooses to alter the camera speed to achieve a specific result. He or she might choose to slow down the movements of a small puppet by shooting at a higher frame rate, to give it a look of more weight. Shooting at a lower frame rate allows the puppeteers to coordinate complicated movements in slow motion, then the puppet appears to move realistically when the film is played back at normal speed. Shooting the fly in *Beetlejuice* at four frames per second gave it the appearance of zipping from one spot to another. Puppeteers need to know how to modify their performance when there is a change in camera speed to keep their puppet in character.

In many instances it takes several puppeteers to operate a single puppet. Hand puppets for film usually take three puppeteers per character: one person operates the head, mouth and body, one person moves the arms and hands, and one controls the eyes. To

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bring to life such a complex character, puppeteers work a bit like chamber musicians: listening, watching, and responding carefully to each other's moves. A strong sense of ensemble develops. In the screen version of *Little Shop of Horrors*, there were over 65 performers operating different portions of the man-eating plant Audrey II. For creatures this complicated, puppeteers break down their movements to a precise series of numbered parts, much like a musical score.

#### HISTORY OF SAG PUPPETEERS

Years ago, the first puppeteers joined SAG as specialty acts, performing their own routine for features with no set pay rate (Bill Baird, Shari Lewis and Edgar Bergen are examples). This was not the best situation for the talent because there were reported instances in which producers copied an established act and hired a non-union person to perform it.

A major problem surfaced when puppeteer Bob Baker placed a bid to build and perform several puppets for a new film. SAG told him that if he wasn't seen on camera, he needed to be in the International Alliance of Theatrical and Stage Employees (IATSE) which handles prop builders and special effects technicians. IATSE responded that they were not interested in "wrist performers." Due to the jurisdictional confusion, Bob lost the job.

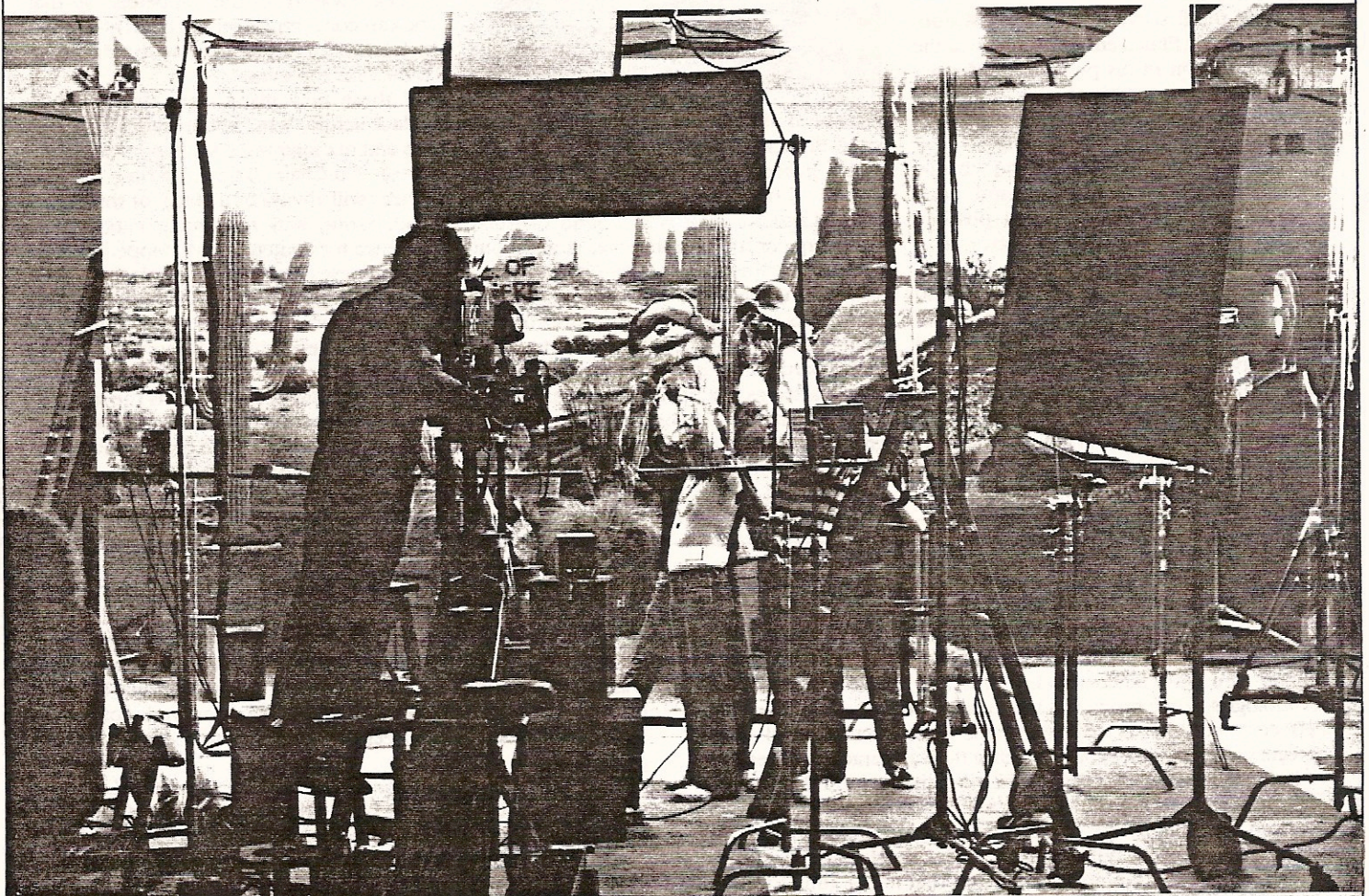
It wasn't until Ronald Reagan's second term as SAG President in the late 50's that things changed. Bob performed a live birthday show for the Reagan family and afterwards initiated a discussion about puppeteers and SAG. Mr. Reagan reasoned that since puppeteers take dramatic direction from the director they must

**Puppeteers work like  
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as an ensemble**

be considered the same as actors. Puppeteers came under SAG's jurisdiction the next time Guild film and TV contracts were negotiated. For *G.I. Blues* in 1960, Bob was considered a principal performer and for the first time was given his own dressing room.

Still, in some instances, puppeteers were off-camera performers. Then, with the popularity of the characters in shows like *Sesame Street* in the 1970's, many more commercials began using puppets. By 1985, the SAG Commercial Contract reflected the changes in the industry by specifically including puppeteers as principal on-camera performers with the same benefits and residuals as actors.

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*Puppeteers must often contort themselves to stay out of camera range*

# What's a Waldo, Anyway?

"The Waldo will do to puppetry what the word processor did to the typewriter," predicts puppeteer Rick Lazzarini. He should know. Lazzarini is a pioneer in the field of the "Waldo" technique, one of the many new ways to electronically manipulate puppets. This mechanical gizmo detects the movements of an off-screen performer and automatically duplicates them in an on-screen animatronic creature. A current yet somewhat exaggerated example of the use of a Waldo can be seen in the special effects extravaganza, *FX2*, in which Bryan Brown manages to fight a foe by remotely instructing his Waldo-operated clown dummy to kick and punch the unsuspecting villain. The real Waldo puppets have been used in productions as diverse as *Ghostbusters II*, *Radio Flyer*, *Teenage Mutant Ninja Turtles* and TV's *Dinosaurs*.

Before their application in motion pictures and television, "Waldos" primarily referred to the mechanical arms, telemetry, and other anthropomorphic gadgetry aboard the NASA spacefleet. NASA engineers in turn took the name from a 1940 Robert A. Heinlein novella about a disabled scientist named Waldo who built a robot to amplify his limited abilities.

One of the first wizards to use a Waldo-type device for filmed entertainment was the late Jim Henson in his prime-time Muppet revue. In one memorable episode of *The Jim Henson Hour*, he introduced an amazing bird character (whose name was — you guessed it — Waldo) that could change shape, size, and color on command. Such a metamorphic critter could not possibly have been enacted by a live actor in a suit or by a performer utilizing a three-dimensional puppet. The off-camera Waldo bird was physically manipulated by a puppeteer, wearing a skeletal framework 20 to 30 feet away from the actual set. Through the magic of computers, the featured star appeared in the same frame with the show's human headliners. The Waldo device was so successful that it was re-used on several *Fraggle Rock* episodes as well.

When faced with the challenge of mak-



Rick Lazzarini in a "Waldo" suit

ing a head of lettuce spring to life for a Kraft salad dressing commercial, puppeteer Lazzarini experimented with a new kind of Waldo — one that reproduced facial gestures. Lazzarini contrived a kind of Rube Goldberg contraption that was straight out of a Steven Spielberg movie. He glued sensors to a helmet over his head, affixed sensor probes to his face, routed wires from his helmet's sensor board into a computer circuit board, and attached "servomotors" which acted as a puppet's "muscles." When he raised his left eyebrow, his on-camera creature lifted its left eyebrow. Lazzarini also found ways to transmit signals to the puppet for head tilts, jaw and lip movements, and smiles. This technique gave puppets the

ability to realistically project actors' emotions.

"For the full range of effects you can get with these new puppets," says SAG Puppeteers Chair Eren Ozker, "you would normally need four or five performers operating remote control devices. The real beauty of the Waldo is that it enables a single puppeteer to control the character's movement, facial features, and body language. It allows even the most fantastical character to interact with live actors. It also cuts down on the amount of heavily choreographed rehearsal that would otherwise be required, and the puppeteer can be more spontaneous in his or her performance."

Actors who are worried about losing jobs to an invasion of Waldos should rest assured. "You will always need a performer to operate the mechanisms," says Ozker, "because it's not enough for a character to come alive. It must also give a dramatic performance and that's something only an actor's sensibility can provide." Lazzarini agrees. "You need a puppeteer with a particularly expressive, rubbery face, or else your character is going to be rather boring. The Waldo takes the onus of the technical process away from the puppeteer, so that you can concentrate on the content of your performance, rather than worrying about 'Who's on the eyes?'"

If these new gizmos are not going to replace actors, what about traditional puppets and marionettes? SAG Puppeteers Committee Co-Chair Tony Urbano replies, "There will always be a place for traditional hand, string and rod manipulation. The challenge for contemporary puppeteers is to add the new electronic technology to their puppeteering abilities." SAG Puppeteers officer Tim Blaney offers, "Puppet technology is constantly evolving — tomorrow it could be laser manipulation. But the basic art and work of the puppeteer remains the same: to project a characterization through *whatever* controls are being used to give an inanimate object the illusion of life." ■

Harry Medved

## THE PUPPETEERS CAUCUS

Early in 1989, after a puppetry workshop with Tony Urbano, a few puppeteers stayed to discuss problems they were encountering on film sets. Since the introduction of advanced puppet technologies, some producers have claimed that these puppets are "effects" and thus not covered by the Screen Actors Guild. Puppeteers say that it makes no difference how a character is operated — if the job requires a performance, then they are entitled to SAG contracts. Everyone agreed that while the scope of puppetry had changed, SAG and the producers were still operating with old information. One of the puppeteers, Eren Ozker, who had previously served on a SAG committee, suggested that it was time to bring the Guild up to date. Within a week, a small delegation of puppeteers met with SAG executives. Soon the word went out to all

members of the Guild inviting interested professional puppeteers to attend a special meeting.

The Caucus held its first meeting on May 24, 1989, at SAG Hollywood headquarters, with 48 puppeteers in attendance. This was one of the strongest special interest group turn-outs in SAG's history. The first Steering Committee was approved, goals were discussed and subcommittees were formed to focus on specific projects.

The National Steering Committee of the Puppeteers Caucus is Eren Ozker, National Chair; Tony Urbano, Hollywood Chair; Carrotte, New York Vice Chair; Mark Bryan Wilson, Hollywood Vice Chair; Tim Blaney, Recording Secretary. Cheryl Blaylock, Tim Lawrence, Terri Hardin, Rick Lazzarini, and Steve Sherman are Members-at-Large.

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## ACTION

### THE CAUCUS AT WORK

The Caucus has become a lobbying force for puppeteers within the Guild. It keeps SAG up to date with its changing needs and encourages puppeteers to participate more fully in Guild activities. Our main goal is to educate people within the industry about modern puppeteering. This will be achieved in several ways:

- ▶ A committee is putting together a humorous and informative pamphlet to aid production staffs working with puppeteers. The purpose of the pamphlet is to minimize on-set problems and (unintentional) abuse.
- ▶ A series of articles is in the works explaining contemporary puppeteering on camera. Some have already appeared in various trade publications.
- ▶ The late Jim Henson generously provided the Caucus with an entertaining 12-minute videotape illustrating the current techniques employed by puppeteers in film and television. Another tape illustrates the broad range of SAG puppetry. These tapes are shown within the Guild to educate its members and staff.
- ▶ A paper on body puppets (full-suited character costumes) is being prepared for presentation. It will include recommendations for the establishment of safety guidelines to be followed when such characters are employed.
- ▶ The Caucus pays close attention to SAG contract language and nomenclature regarding puppeteers. It prepares for negotiations by offering proposals to the Guild's Wages and Working Conditions Committee. The Caucus is also establishing a master list of puppeteers. In SAG's last Special Skills Survey, there were 1,432 members who checked puppetry as one of their talents. We estimate that only 200 of these performers are *primarily* puppeteers. In the past there was no way to distinguish them from actors who have had little professional experience with puppetry. Recently SAG has approved the Caucus's recommendation and changed the Skills Bank Form to include Puppeteer as a recognized performance category along with Actor, Stuntperson, Voice-over, Singer, and Dancer. This way a performer can now choose his or her priority. The Caucus hopes to provide a reliable list of professional puppeteers to signatory producers.
- ▶ The Caucus plans to sponsor workshops and seminars on such topics as mouth and voice synchronization, monitor use, audition techniques, and the effect of new puppeteering technology in film.

### THE CAUCUS MOVES AHEAD

The Caucus is continuing its effort to improve the status and working conditions of puppeteers in the film industry. Caucus meetings are held regularly in both New York and Los Angeles. The caucus now has 94 members in Hollywood with nine steering committee members, 55 in New York, four in Chicago, three in San Francisco, two in Atlanta, one in Seattle, one in Washington and one in Florida. If you are a professional SAG puppeteer, we encourage you to join our caucus and share your expertise with the Guild and the rest of the industry. ■



*Lisa Sturz (covered at far right) controls the bands and Tim Rose (looking down at the monitor) works the beak of the infamous Howard the Duck*

### HAVE YOU REGISTERED AS A PROFESSIONAL SAG PUPPETEER?

Do you have historical information  
or photos of SAG Puppeteers?

▶ **THE PUPPETEERS  
CAUCUS NEEDS YOU!** ◀

To obtain a Special Skills Survey and join  
the Caucus please call the SAG Committee  
Office in Hollywood at (213) 856-6796 or  
in New York at (212) 827-1447

### ★ ABOUT THE AUTHORS ★

**Lisa Aimee Sturz** has been a member of the Puppeteers of America since 1975. She has studied the craft extensively, earning degrees in experimental theater and puppetry. She has puppeteered in such films as *Captain Eo*, *Howard the Duck*, *Who Framed Roger Rabbit* and *Muppetvision 3D*.

**Mark Bryan Wilson** has been a member of the Puppeteers of America since 1978, and has been building puppets for the industry for over 10 years. After studying with the experts, his credits include *Ghostbusters*, *Muppetvision 3D*, *Beetlejuice*, *My Science Project* and *Honey, I Shrank the Kids*.