

**"EMPIRE"  
BONUS  
PHOTO SECTION**

**At Last: THE EMPIRE STRIKES BACK!**

# STARLOG

TM  
UK  
95P  
K49112  
DGS  
\$2.25

**NUMBER 35**  
JUNE

**The BLACK HOLE  
Robots**

**Preview of  
BATTLE BEYOND  
THE STARS**

**Animated SF  
STAR BLAZERS**

## **DARTH VADER RETURNS!**

**EXCLUSIVE FEATURES**

**Interview with  
New Star Warrior  
BILLY DEE WILLIAMS**

**BRIAN JOHNSON Reveals  
SPECIAL EFFECTS Secrets**



# Up from the Depths

## The Making & Breaking of

# 'Voyage to the Bottom of the Sea'

By BILL COTTER & MIKE CLARK

**M**uch attention has been paid to the success of a relatively small number of science-fiction programs, with cults arising over several such as *Star Trek* and *The Prisoner*. However, one series which had a longer network run in addition to a feature film presentation has not received the same notoriety. This series is Irwin Allen's *Voyage to the Bottom of the Sea*.

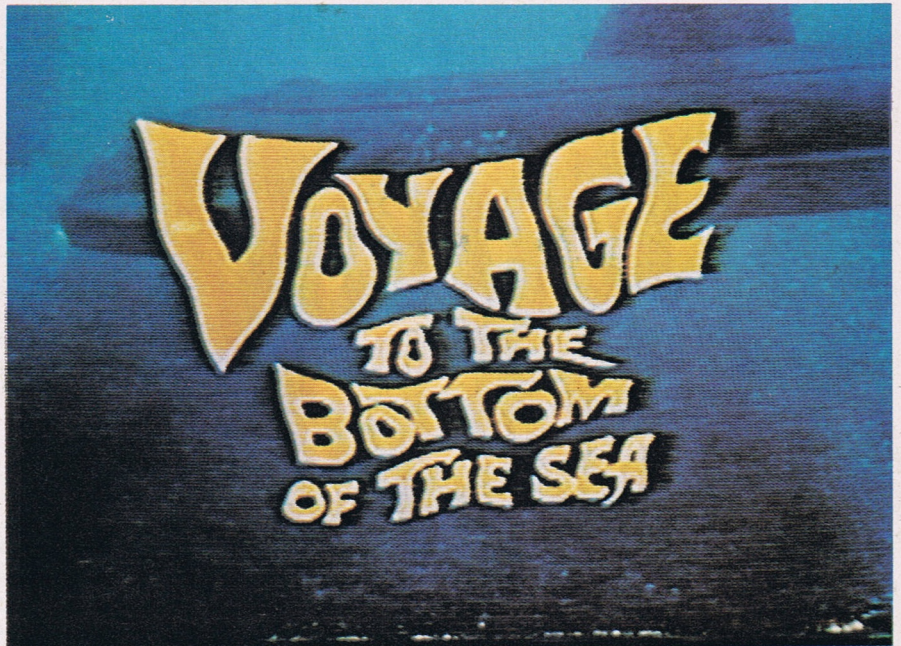
Premiering as a feature film in 1961, *Voyage* went on to a four-year run on ABC-TV from 1964 to 1968, and is still seen today in syndication. A study of the feature and its subsequent evolution to television provides an interesting look into the creation of a successful adventure/science-fiction production.

### The Feature Film

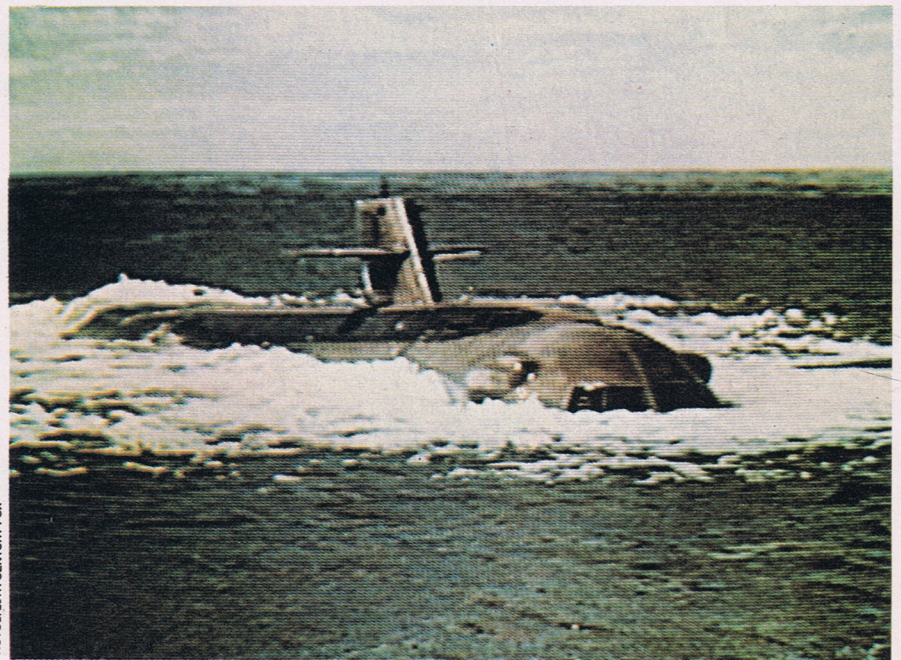
The story of *Voyage* opens in the mind of producer Irwin Allen, a showman with a long history of involvement in feature films and efforts connected with Hollywood. Radio host, literary agent, columnist and writer, Allen came to Hollywood in the 1940s, became an agent for several well-known writers, and went on to produce films such as *A Girl in Every Port*, *The Story of Mankind*, and the Oscar-winning documentary, *The Sea Around Us*. Two of his more recent films, *The Poseidon Adventure* and *The Towering Inferno*, are still rated in the top 15 box-office grosses in the world.

With the beginning of the 1960s, Allen had finished *The Lost World* and was considering future properties that conformed to his formula for theatrical success: escapism, adventure and suspense—within the realm of scientific possibility. Having a life-long interest in the sea, Allen turned to the science of the future as the basis for his next project, which was the feature version of *Voyage*.

Working with writer Charles Bennett, Allen created an adventure story with science-fiction overtones. In a forerunner to his later series of disaster films, Allen pitted the men of the *Seaview*, the world's mightiest nuclear submarine, against the forces of nature gone wild and human fear of the unknown. The plotline involves the menace of the van Allen radiation belt, which has caught fire in Earth's atmosphere. Unless Admiral Harri-man Nelson (Walter Pidgeon) can fire a



Above: The new miniatures still unfinished, titles from the pilot were used on the first color episodes. The pilot was shot in color, but aired in B&W.



The 19-ft. miniature of the *Seaview* rises majestically out of the ocean.

PHOTOS: 20TH CENTURY FOX

nuclear missile from the *Seaview* and destroy the belt, the world will be lost. Nelson's plans are hampered by other scientists who do not share his theories, and will stop at nothing to

prevent the launch. Despite mutiny, sabotage, hostile powers and an attack by a giant squid, Nelson reaches his launch point and detonates the belt.

Storyline in hand, Allen's task included designing from scratch a nuclear submarine of the future, and providing special effects on the order of a spectacular fire in the sky, a



Left to right: David Hedison, Richard Basehart and Mark Slade, from the pilot episode "Ten Days to Zero."

voyage under the polar ice cap, a battle between two atomic subs and the attack of the giant squid. Allen had the assistance of Jack Martin Smith and Herman Blumenthal, two noted art directors, for the design of the *Seaview*, and L.B. Abbott for the special effects which were to be a major part of the production.

### Designing the "SSRN Seaview"

In designing the 600-foot-long *Seaview*, Allen, Smith and Blumenthal were faced with the need to create a submarine that was not only visually interesting but theoretically feasible. The ship also had to be designed so that the sets were practical for film production. Approaching the U.S. Navy for background data, Blumenthal was refused information for security reasons. Using the limited information available, (mostly from British publications), the design of the *Seaview* became one mostly of theory. Concerned that a few of their ideas might be totally impractical, Blumenthal consulted with a marine design firm, and recalls their answer. "Nothing you do hasn't already been designed." The *Seaview*, however, was to go far beyond traditional concepts.

The most famous aspect of the *Seaview* is the observation nose, a room affording unobstructed views of the undersea life. A two-level room with eight large windows made up the nose (this was altered for the television production), although only the lower section was constructed for the live-action scenes. The entire bow structure of the ship flares outward, and is based on the shape of a manta ray. Smith and Blumenthal both felt using this fish design gave the *Seaview* added stability, an important factor in rough underwater currents. The main body of the sub is based on conventional submarines, but the tail section was influenced by the split-tail concept of the Beechcraft Bonanza airplane, with tailfins suggested by Allen's 1959 Cadillac. All of these plans were carefully coordinated with Abbot to ensure that the miniatures would operate as designed.

The interior of the ship consisted of several main sets: the control room, missile room, a large water-filled tank for fish observation, crew and officers' quarters and the observation nose. The control room was designed to resemble that of an actual sub, although Blumenthal remembers that the gear, much of it purchased from Navy surplus, "looked great, but the Navy observers didn't know what did what!" Apparently, the original control-room design wasn't colorful enough for Allen, who added many of the blinking lights and the famous flashing computer (referred to as the missile tracking system) to the set. The computer, originally built for the Tracy/Hepburn feature *Desk Set*, was also seen in Robby the Robot's second film, *The Invisible Boy*, and in David (Al) Hedison's *The Fly*. The remainder of the control room consisted of the sonar, radar and systems which would be found in any other ship. For added visual impact, the traditional periscope was enhanced by a color television camera

and large screen monitor.

### Miniatures

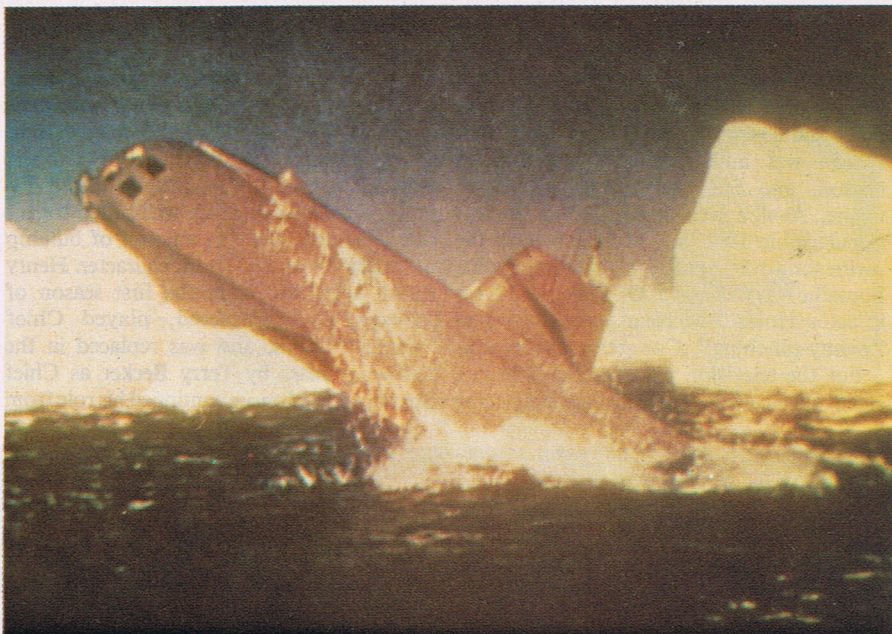
Art director Blumenthal points out that close cooperation with special-effects chief L.B. Abbott was observed during the planning stages of *Voyage*. Drawings were scrutinized by Abbott for practical use in miniature photography, and passed back to Allen for final approval. Clay renderings from Fox's miniature construction department followed, and then castings were made in plaster and wood for the final fiberglass treatment. Several copies of each scale were made, some with sectional cuts for use as guidelines for the next size up. Three different scales of *Seaview* were used in the film. The largest was 19 feet long and was used only in surface shots (the majority of which were shot on the huge 285 x 85-foot tank built at

the Fox ranch for *Cleopatra*). A three-and-one-half-foot rendition was used in the squid attack, and later as a fixture in Nelson's cabin. An eight-foot version with internal lighting and bubble effects was seen for the majority of the underwater shots.

Longtime Irwin Allen associate Paul Zastupnevich created the costumes worn by Nelson and members of the Bureau of Marine Research. Based on conventional naval dress, Zastupnevich extended them a few years in design and added new insignias. In later years, Zastupnevich designed costumes for *Lost in Space*, *Time Tunnel*, and *Land of the Giants*, as well as the various monsters and aliens used in Allen's productions.

### Casting

Allen has loyalty not only to his production staff, but to his actors as well. Over the years,



The first glimpse of the *Seaview* in the famous opening from the 1961 feature.



Walter Pidgeon and Robert Sterling as Nelson and Crane before the rear projected viewports.

he has used many actors in different projects . . . notably Peter Lorre, Richard Basehart, Barbara Eden, Regis Toomey and others. After considerable success in *Forbidden Planet*, veteran star Walter Pigeon portrays Admiral Nelson . . . stubborn, egotistical and brilliant. Robert Sterling, best known from the TV series *Topper*, plays Capt. Crane . . . young, efficient and loyal to the Admiral, until late in the picture, when he decides to turn against Nelson. Peter Lorre is Commodore Emery, on board *Seaview* to study marine life (including walking his pet shark, Bessie). Joan Fontaine brings her considerable background to use as Dr. Susan Hiller, trapped aboard *Seaview* following a hasty departure from New York. Hiller's assignment is the study of crew members under stress.

Other cast members from the feature film includes Regis Toomey as the *Seaview*'s doctor, John Lital as Vice Admiral B.J. Crawford, Michael Ansara as iceberg survivor Alvarez, Barbara Eden as Crane's fiancée, Cathy Conners, Frankie Avalon as Romano, Del Monroe as Kowski, along with Mark Slade and Henry Daniell in supporting roles. Pigeon was authoritatively boisterous as Nelson, and Sterling an adequate Capt. Crane. Avalon was in the picture for his popularity in 1961, and also performed the theme song over the picture's opening credits. Fontaine was well cast as Dr. Hiller, and comic actor Howard McNear was effective as "penny-pinching" Congressman Parker.

For the television pilot produced in late 1963, Allen called upon Shakespearean actor

Richard Basehart. Basehart's past achievements include *La Strada*, *Moby Dick* and *Hitler*. Probably a great deal of *Voyage*'s TV success lies with the casting of Basehart, according to director Harry Harris. "Irwin could have gotten any half-baked actor in Nelson's role . . . and the series would have lasted a month. But Basehart had the believability to carry off even the far-fetched situations that sometimes arose. He'd go in and play it straight . . . the only way it could have worked."

As Capt. Lee Crane, David Hedison brought the right amount of youth and command ability to the role. Hedison was already experienced in the science-fiction/adventure film format, having starred in the thriller *The Fly*, *The Enemy Below* and another Irwin Allen production, *The Lost World*. The role of Capt. Crane had not been finalized the night before shooting commenced, so Allen summoned Hedison from England, where he was preparing for a BBC appearance. After a quick trip back to Hollywood, and a quicker costume fitting, Hedison began shooting the next day. Crane's right-hand man, Cmdr. Chip Morton, was portrayed by Robert Dowdell, fresh off the *Stoney Burke* TV series. Dowdell, although well-suited for his role, was not given the amount of buildup necessary for an important character. Henry Kulky, who died after the first season of *Voyage* was completed, played Chief "Curley" Jones, and was replaced in the following years by Terry Becker as Chief Sharkey. Del Monroe continued his role from

the feature, with a slight name change from "Kowski" to "Kowalski," and Paul Trinko was crewman Patterson.

Several background technicians were hired back from the feature film so that stock footage could be utilized in the first few episodes. Mark Slade returned briefly but went on to *The High Chaparral*. In the second season, a surfer-type named Riley was played by Allen Hunt, who did not return for the other seasons. The *Seaview*'s doctor was played by several actors in the first two seasons, finally settling down to Richard Bull. The only other regular crewmen were Arch Whiting, who played radio operator Sparks, and Paul Carr as Seaman Clark.

The feature film was a successful project, thereby creating an interest in the continuation of the *Seaview*'s adventures. The sets from the feature were saved due to Allen's pride in the production, and with a hope that they might be useful in the future.

### Stock Footage

Although the use of stock footage to build up an episode of a TV series is commonplace today, in 1964, only series like *Combat* or *12 O'clock High* could make extensive use of existing footage. Not so with *Voyage*. Irwin Allen had the entire amount of film which had been shot for the feature, in addition to Fox's huge library of footage.

The first episode built around stock footage was "Turn Back the Clock." In 1960, Allen had produced *The Lost World*, a story of dinosaurs encountered in a lost



Guest star Eddie Albert stares out the *Seaview*'s viewports in the pilot which used the 1961 feature film's sets.

civilization. Along with Michael Rennie and Jill St. John, a young actor named David Hedison co-starred. For the TV episode of *Voyage*, actor Nick Adams leads Nelson, Crane and Yvonne Craig to that same lost world, where expert matchup of costumes and sets were used, along with some of the same actors from the *Lost World* feature. Television audiences were wise to the show, however, and wrote letters protesting the use of stock footage. Most of *Voyage's* first-season special effects with the *Seaview* were from the feature film, although for new effects footage, a small two-foot version of *Seaview* was used, the scale revealed by poor craftsmanship and over-sized bubbles.

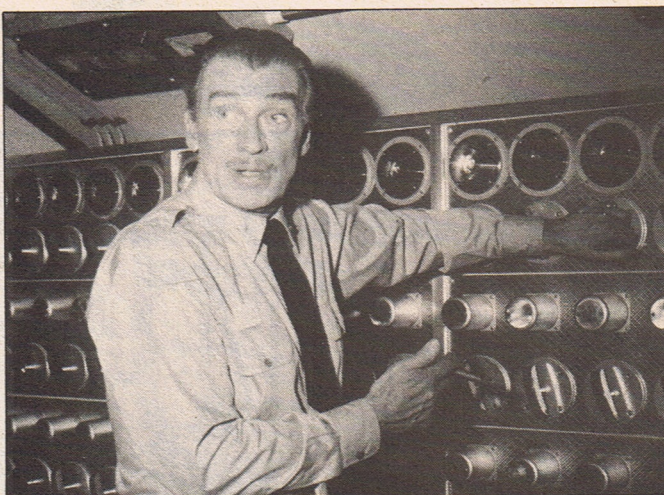
Fortunately, the eight-foot model prevailed in later seasons, although tinted special-effects footage from the first season was inserted in color episodes (note the nose of *Seaview* in certain shots, particularly any episode with the giant whale). The major plot of the *Voyage* feature was used in the second season "Fire in the Sky" episode. Allen went to the extreme with stock footage in *The Time Tunnel*, where film emulsions often looked quite different from contemporary raw stock. Use of stock footage now is quite common, particularly among programs produced by Universal, who have padded shows like *The Incredible Hulk* and the *Hardy Boys Mysteries*.

### Special Effects

To produce the myriad of special effects called for, Allen relied upon the legendary L.B. Abbott, who had been serving on the special-effects crew of Fox for years on pictures like *Day the Earth Stood Still*, *The Enemy Below* and *The Fly*. Abbott is an expert with miniature photography and optical effects, and tackled all of Allen's projects with vigor. As Harry Harris says, "Irwin asked for the impossible, and Abbott gave it to him!" The first shot in the *Voyage* feature is memorable... icebergs surrounding the icy waters of the polar cap.

Suddenly, from underwater, the streamlined *Seaview* makes a dramatic 30-degree angle surface. The shot is breathtaking, and sets the mood for the film. The effect was achieved by anchoring the 19-foot miniature of the *Seaview* to the floor of the tank with a winch, and then releasing it to the surface while simultaneously emptying the ballast tanks of detergent-saturated water. The fire in the sky resulted from printing a flame thrower backwards and forwards over 50 times in an optical printer. Matte work was used as the *Seaview* is shown entering New York harbor.

The icebergs crashing down on the *Seaview* during the film's opening moments are wax-covered cheesecloth, dropped from overhead railings. The *Seaview* itself was controlled by thin guidewires in the "Howard Lydecker" method, using horizontal and vertical guides. The TV series continued these successful techniques, including Lydecker's handling of the Flying Sub. Horizontal guidewires ran from the fore and aft sections, and when ad-



Walter Pidgeon as Admiral Harriman Nelson stands by at the missile launch controls in the film.

Some of the film cast, from left to right: Cathy Connors (Barbara Eden), Dr. Hiller (Joan Fontaine), Commodore Emery (Peter Lorre) and Admiral Nelson (Walter Pidgeon).



justed with a crank handle, caused the ship to "fly" through the air.

Lydecker had used this with great effectiveness in the old *Rocketman* serials of the late 1940s. Other effects inside the sub included the view through *Seaview's* glass nose, using rear-screen projection, and in some cases, thin tanks of water through which air was blown to create bubbles. Some observation nose shots required matte work, as with the giant squid attack.

The use of Fox's underwater tank allowed camera set-ups through several view ports. Some ports were bubbled, so that a camera could track the sub for several feet. Technicians also built an underwater sled, so cameraman John Lamb could be in the tank with models or divers for unobstructed coverage. These shots could then be inserted as the views seen through the *Seaview's* glass nose.

Lighting underwater effects can be very tricky, due to the fact that colors change with the depth of the shot. Underwater lighting was rigged so that colors would be brilliant enough for audience enjoyment. With the loss of the underwater tank to real estate development, Allen's last TV project for Fox, *City Beneath the Sea*, was largely shot dry and the underwater lighting effects were added optically. This method was also used in *Man from Atlantis*, although a lack of bubbles usually gives the effect away.

### Writers

In any series that runs four years, many writers must be used. Over the years Allen has developed a stable of writers, and most of *Voyage's* scripts were contributed by these men. William Welch, Robert Hamner, Charles Bennett, and Al Gail worked on all of Allen's programs.

The most prolific writer was Welch, who also served as story editor after the departure of Allen Balter. Welch, a believer in contact between the dead and the living, introduced this theme into several episodes (such as "The Phantom Strikes"), and also contributed many of the spy drama scripts.

Even Harlan Ellison wrote for *Voyage* ("The Price of Doom"). Ellison recalls attending a story conference with Allen and ABC liason Adrian Samish. When Samish demanded a woman character be revealed as a spy wearing a rubber mask, Ellison balked and was challenged by Samish. Ellison, known for occasional temperamental outbursts, let his feelings be known to Allen and Samish, resulting in the use of his pen name on the story credits.

### From Feature Film to TV Series

The transition from the feature to the television series came about as Allen looked for new areas for involvement to replace the rapidly shrinking marketplace for lower-

budget films such as *Voyage* (although the *Voyage* feature was the most expensive science-fiction film produced by Fox at the time, the budget was dwarfed by the "blockbusters" of the period). Thus, Allen saw television as a new medium. "I just love making films, and television presents many challenges over condensed periods of time." Allen noted, "... the area presented itself and I went."

Accordingly, work commenced on a pilot film for a projected television series of *Voyage*. This was the most logical project at the time, as the feature's success could be combined with the financial feasibility of re-using the research, miniatures and sets which had been placed in storage. "For example," said Allen, "the three main underwater sections of our submarine cost more than \$400,000 to build—more than most television pilot films of that period in their entirety."

Also, Allen's reputation and attention to detail made him, according to Balter, "a big fish in a small pond." The story was written by Irwin Allen, and the technical crew responsible for the feature's success reunited. Once the pilot was made, several months went by before ABC ordered the series into production for the 1964-65 season.

### First Season

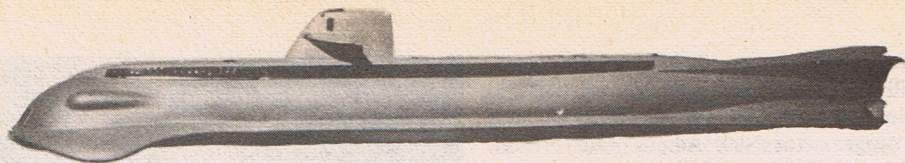
The first year of the series saw little in the way of change to the *Seaview*. More use was made of the mini-sub, and a new diving bell was added. Realistic effects in the diving scenes were achieved by shooting in the waters off Catalina Island in the Pacific, a feature replaced by use of the tanks at Fox in the later years. In this first year, emphasis was placed on the adventure aspects of the *Seaview*'s mission, with science fiction playing a minor role.

Del Monroe recalls, "They were going to get involved in current events, and just use the *Seaview* as a means of getting from one place to another. The action wasn't going to take place just on the submarine." While the ratings were respectable, they rose dramatically after a story involving a huge plankton colony aired, thereby setting the tone for the following episodes. Much of *Voyage*'s finest episodes were from the first season, and although they were shot in black and white, the directors achieved a high level of effectiveness. The pilot, directed by Allen, was shot in color, allowing re-use of footage in later episodes.

### Second Season

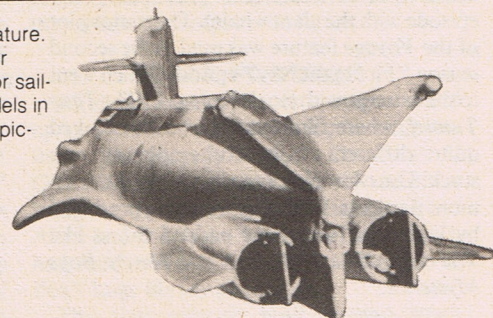
Besides the introduction of color for all episodes, the second season saw many changes take place inside the *Seaview* and among the crew. The addition of Chief Sharkey was a major casting change, and introduced one of the more popular characters, while Seaman Riley was added in an ill-fated attempt to attract teenage viewers. However, it was the *Seaview* herself that saw the greatest changes.

The entire nose area was redesigned to replace the former eight windows with four larger ones for a more streamlined ap-



PHOTOS: MIKE CLARK

Top and right: The four-ft. *Seaview* miniature. Above: Irwin Allen in his office at Warner Brothers. Allen has always had a love for sailing ships and is seen here with two models in his office. The walls are decorated with pictures of grand ocean-going vessels.



pearance. The control room was dropped one deck to be on the same level as the nose, thereby creating one large set with greater visual impact. The control room itself was redesigned with large monitors, new instruments and controls, and the computer placed on the port wall rather than the starboard. Interestingly enough, no explanation was ever aired as to the reasons for the changes, or even how they were achieved.

The most interesting addition for many viewers was the Flying Sub, a small submarine that could also serve as an airplane. Much like *Star Trek*'s transporter, the Flying Sub allowed for rapid changes in location and new plot elements. Berthed in a hanger under the observation nose, the Flying Sub was designed by Allen, Smith and Bill Creber and executed by Abbott, and was actually studied by the Navy for its potential. Four different miniatures were necessary to provide the flying and underwater shots of the Flying Sub.

### Third Season

The third season saw few changes either in the ship or cast. With Seaman Riley's departure, and the death of Seaman Clark, the cast remained the same for the rest of the series. Storylines became more science-fiction oriented as the men of the *Seaview* fought aliens from outer space, invaders from hidden civilizations under the sea and men possessed with supernatural powers (Mummies, wolf-men, telepaths).

Stories with Nelson or Crane under the control of aliens or enemy agents became commonplace, to the detriment of the series. The general quality of direction went down as

more emphasis was placed on action rather than story and character development. Stock footage from previous episodes and other Allen feature films padded some episodes to the point where they looked like a repeat on the first run.

### Fourth Season

As the 1967-68 television season got underway, *Voyage* was returning to some of its original qualities. Stories with spies and intrigue returned, and the crew occasionally went ashore. Possibly *Voyage*'s best fourth season episode, "The Man of Many Faces" (written by William Welch and directed by Harry Harris) took many surprise twists and turns. New footage of the *Seaview* and the Flying Sub (with retractable arms added to the front section) were used this year.

While the ratings for the fourth season were respectable, Allen and ABC realized that *Voyage* had run its course, and as the *Seaview* sailed into the Nielsen graveyard, plans were made to replace the show with another Allen production, *Land of the Giants*. It could be said that Allen's efforts for *Giants* led to a decreased involvement on *Voyage*, with episodes involving such plot elements as leprechauns and puppets who menaced the *Seaview*.

### Today

In 1969, *Voyage* went the route of most series that have more than two seasons on the network—syndication. The series has been a popular one, and still runs today. In many areas of the country *Voyage* can be seen seven days a week, although the black and white

(continued on page 65)

# Voyage . . .

(continued from page 30)

first season episodes are rarely seen in most markets.

The actors from *Voyage* have gone in many different directions. Basehart went on to appear in *The Andersonville Trial*, and guest appearances on shows such as *Ironsides*, *Columbo* and several Irwin Allen telefilms. His latest series role was in the ill-fated *Web*. Hedison left to act in Europe for several years, and was seen in the Bond film *Live and Let Die*. Also back on American TV with a part in Fox's telefilm *Return to Peyton Place*, he has appeared as a romantic lead on dramatic and situation-comedy programs.

Robert Dowdell continues to act occasionally, although his interest in California real estate is given primary consideration. Dowdell recently appeared in the season premiere of *Buck Rogers*, along with a part as a Naval doctor specializing in submarine disasters in *240 Robert*. Terry Becker is now a partner with actor Carroll O'Connor in a television production company. Del Monroe is still involved in acting, with recent guest roles in *The Dukes of Hazzard*, and is a brewer for Anheuser-Busch. Richard Bull is now a regular on *Little House on the Prairie*. Paul Trinka died several years ago, and Allen Hunt is busily involved with TV commercials.

The miniatures used in the production have generally survived to this day. The 19-foot *Seaview* was on display at the now-defunct Movie World in Buena Park, California, (also displayed there was the full-size "Mini-Sub," and the miniature U-Boat used in several *Voyage* episodes). After a brief exhibit at California's Marineland, the majority of the miniatures are now back at Fox. The four-foot *Seaview* remains unchanged, while the eight-foot has been radically modified for use in Allen's *The Return of Captain Nemo*. An 18-inch miniature of the Flying Sub is also in storage.

Could a series like *Voyage* be done today? Probably not. Current television production limits creativity by shortening lead time and the threat of cancellation after a short time period (*Supertrain*, *Battlestar Galactica*, *Quark*, *Man from Atlantis*). The research and development necessary is harder to come by with network demands for huge ratings in a short amount of time.

Probably the greatest obstacle is the current television mood for light comedy and titillation style of adventure that lacks any real ingenuity. Many of television's best directors and writers have fled to the movies, where creative freedom is somewhat looser and budgets are larger. The best of *Voyage* holds up very well in retrospect, and that is the true test of a series . . . the test of time. ★

Note: The feature film version of *Voyage to the Bottom of the Sea* is available on video cassettes from Magnetic Video, Farmington Hills, Michigan 48024.

SPECIAL THANK-YOU'S: Irwin Allen, Tony Habeeb, Jack Martin Smith, Herman Blumenthal, Ivan Martin, Bill King, Harry Harris, Allan Balter, Del Monroe, Robert Dowdell.

# Robots

(continued from page 19)

I could have gotten a human inside the tripod to steer it—a minimum-sized human. But time and other things ruled that out. They wanted to get the Sentries into production first because they thought they would be the easiest.

With little time available to develop a new look for the robot, Miller and Ellenshaw decided to utilize the head McGinnis had developed for the humanoids. They wanted McGinnis to quickly develop a new body for the humanoid head.

For the humanoids, they decided to go with a draped figure and bald face, which McGinnis feels worked out well.

Of the Sentries, McGinnis says, "I had only three days to come up with a body to go with the humanoid head. Ron told me: 'I have good news and bad. The good news is that we want you to do the Sentries. The bad news is that we want them by Wednesday.'"

The Sentry robot bodies were designed as robot suits, cast in fiberglass sections to fit the dimensions of the actors' bodies. The pieces of each suit were like pieces of armor. They were snapped in place on the actors, who wore leotards colored to match the robot suit.

"My feelings, though, are that I did my best to be unique under the circumstances. I really didn't have any problems other than that everything was so rushed. They had two years of dead alleys. Most of my work was cranking out sketches and ideas and coming back to the drawing boards.

"If people see a similarity between Vincent and R2-D2, that is because there is a similarity. I asked why we had to have a small, cute robot? And for that matter, a big bad robot because that could be equated with Darth Vader. But there was no worry about it. The feeling was that when people see the picture, the robot takes on a character that separates it from all past comparisons.

"I think Vincent is unique—quite different from R2-D2, as far as detail and form. I think I was trying to retain a sculpted look. R2-D2 had a lot of graphics. As for the gimmicks, it's all the visual things: The oscilloscope could have been programmed with Vincent's voice; the lasers that extend, plus all the things that pop out.

"I find most people are accepting the robots as characters, whereas I have trouble getting into them because I was too close to them. If you had talked to me a few months ago, I would have been far more critical. I was hoping the movie would be more toward a scientific understanding of the black hole. It came out more of a comedy with a mixture of elements from *20,000 Leagues Under the Sea*. I regard the film more as a child's film than a science-fiction film. It seems very successful. It was evidently what Peter Ellenshaw and Ron Miller wanted." McGinnis sighs wistfully, making it just as evident that, for the artist at least, the final design was never achieved—he just ran out of time. ★

## Official STAR TREK GREETING CARDS



Send a birthday greeting, a get-well note, a see-you-soon message, or keep them for yourself as part of your STAR TREK collection. All are beautiful, full-color, specially designed cards. Each card contains a different communication from a STAR TREK personality. Some contain pop-out features: laser gun, communicator, Spock ears, plus additional intergalactic surprises.

★ Order all twenty-four cards today for only \$12.00, plus postage.

**\$15.80 Value**

STARLOG MAGAZINE

475 Park Avenue South

DEPT. S35

New York, NY 10016

Please send \_\_\_\_\_ set(s) for only \$12.00 plus

\$1.00 for postage and handling.

Amount Enclosed \_\_\_\_\_

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_ ZIP \_\_\_\_\_