The Gear This Year

What's new for '95?

The annual Diving Equipment & Marketing Association (DEMA) show is the place to find out what's new in dive travel and what's new, or will be new, in dive equipment. After scouring this year's DEMA in San Francisco, we gave you a travel report in March. In this issue we take a look at what's new in gear.

Whaddaya Want, a Breakthrough?

I've been going to DEMA shows since the early 1980s. Although I look forward to the show all year for the chance to focus on gear that might — just might — be better than what I'm already diving, I'm usually disappointed.

Most years bring few major changes in equipment but a lot of cosmetic redesigning ("Lime green is IN this year. . . ."). It's true that gear does evolve, but most of the improvements over the past decade have been in the use of improved, more durable materials, rather than design breakthroughs. I admit that my gear now lasts longer and feels more comfortable than ever before, and none of it seems to rot as fast as it did in the good old days. However, if you were to magically vaporize all my present gear right in the middle of a dive and instantly replace it with the equipment I was using in 1976, I might not even notice the difference for a while, and I certainly wouldn't abort the dive.

Occasionally there have been quantum leaps, radical changes, and genuinely new products. The products that have seen the biggest jumps in the past few years are regulators and diving instrumentation (specifically, dive computers).

What's New in Regulators

Since the U.S. Navy started rating regulators in the late 1980s, manufacturers have been cranking out more stable, easier-breathing units at the upper end of their product lines. If you haven't dived a new regulator in five years, you're in for an surprise. If you test-dive one of the units that *In Depth* has recently reviewed favorably, I believe you'll want to replace your old regulator, even if it's in perfect condition. In fact, next month I'm going to Papua New Guinea on a dive trip with an old buddy of mine who's taking the Scubapro Mark V that she used when we were graduate students at Scripps Institution of Oceanography. Since she's partial to Scubapro regs, I'll lend her a D400/Mark X, and I'll bet she'll turn her old regulator into a paperweight when we get back.

What's new in regulators for '95? Basically, nothing since last year. Most manufacturers showed regulators with minor improvements in comfort or ease of setup, additional ports, hose swivels, various mouthpieces, and — of course — new colors for second stages. Most manufacturers didn't even bother to add new high-end regulators to their lines this year, but did roll some of what they learned into the lower-end units.

Mares was one of the manufacturers that did show up with a new high-end regulator, the MR22 Abyss. They say it's even easier to breathe than its predecessors at extreme depths. I have no doubt that the differences can be shown on a bench test. However, most high-end regulators are already so light and smooth in the water that further improvements in breathing are probably going to be subtle.

New Electronics

Last year, Cochran introduced the first hoseless air-integrated dive computer to the U.S. market (*In Depth*, Jan. 94) — "hoseless" meaning a computer that displays air supply and decompression status on a remote readout that is not attached to the tank and does not need a high-pressure hose. This year's trade show did bring a few more hoseless, air-integrated dive computers out of the woodwork.

Cochran was back this year, fighting with its detractors and schmoozing with its customers. Uwatec was pushing the Aladin Air X to retail buyers under its own name and from its own booth, thereby throwing a monkey wrench into the marketing plans of several manufacturers who were expecting to sell relabeled Uwatec units. Nonetheless, at least a few, such as U.S. Divers, are apparently going ahead with agreements to market Uwatec hoseless computers, though it's likely that this situation will change if Uwatec manages to arrange independent sales and distribution in the USA.

Pelagic Pressure Systems, which makes several air-integrated units such as the U.S. Divers Scan 4, the Dacor Omni Pro, and the Oceanic DataMax Pro, hasn't completed its hoseless unit, though prototypes were on display at DEMA.

There were many new conventional air-integrated dive computers at the show. Scubapro brought

the Trac, an air-integrated version of the DC-12, with a display that is much easier to read than that of its predecessor, the DC-11. The Scubapro air-integrated unit uses the same algorithms and chip set as the DC-12, but has a huge display comparable in size to that of the Orca Phoenix.

These new units are considerably less conservative than the DC-11, which locked out most of the repetitive dives that I wanted to make — and did make, using another dive computer — on one trip. Interestingly, the owner's manual for the Trac calls it a "decompression computer," in contrast to most other manufacturers' more politically correct (and wimpy) "no-decompression computer" or "dive computer" product labels.

U.S. Divers is just about ready to start distributing the Monitor 3 (made by Uwatec) and is already underway with the Monitor 2 Plus, an upgraded version of the non-air-integrated Monitor 2 that I often use myself. Seaquest has begun selling a new backlit version of the Suunto Eon (see *In Depth*, Aug. 94) with a luminescent, "Indiglo"-like blue panel that should make it readable in total darkness, and an upgraded memory for logging dives.

There were also several new nonintegrated dive computers. The most interesting of these at first glance was the Divemate Audio-Visual Dive Computer from Mares. It's about as big as a Monitor 2 — dare I compare its size to a pack of cigarettes? — but can be fastened to your mask strap, where it will whisper sweet nothings in your ear in case you're diving in the dark or would rather not look at a gauge on your wrist. Alternatively, you can put it on your wrist or hose and use the standard visual display. It also has a cluster of bright red LEDs that, in theory, will make it legible at night.

As an aside, the dive computers on display at DEMA confirmed that the recreational diving industry is still split on the question of Nitrox. Many of the dive computers I saw (such as the Dive Rite Bridge and the Uwatec Aladin Air X) could be reprogrammed for various air and enriched-air mixtures. Others came with clear warnings against use with Nitrox, and against Nitrox in general.

No . . . No, Wait . . . Yes! We Want the Rings!

The only other significant product changes I noticed at the DEMA show concerned buoyancy compensators. A few years ago, manufacturers were jumping on the streamlining bandwagon, claiming that it was critical to

Our Annual Urchin Award

The annual Diving Equipment & Marketing Association (DEMA) Trade Show is an intense, four-day event. Between attending dive-travel seminars and new-equipment clinics and chasing down industry rumors, it's hard to pack everything into the allotted time. However, each year *In Depth* editors always allow quality time in selecting the annual Urchin Award.

Past recipients and runner-ups of the Urchin Award have included the Presidential, a stars-and-stripes red, white, and blue wetsuit, perfect for that trip to the Red Sea; Diveman, a canister you could strap to your chest with attached stirrups to fit over your feet — bicycle your legs and pump air down to you below the surface; and a nine-inch-long Transformation Toughened Zirconia pry bar, made to outlast the pyramids of Egypt, for only $245.

With past winners like these, it was not an easy task to select this year's recipient. A few odd displays did stand out, like the booth with stuffed toys that made sounds when you shook them, but this was no winner. They sold every toy they brought to the show.

The name made Reef Balls sounded like a contender, but they turned out to be six-by-four-foot concrete balls with holes, used to create artificial reefs. Even with the astounding price of $12,500 (you can lease one for a year for $6,250), this was not a winner — too ecologically and politically correct.

Closer to award material was Candoms. Made to look like a condom but of a size to fit over a beer or soft drink can, they offered no thermal protection. If that wasn't tacky enough, sales remarks were along the lines of "If you're going to use them on a boat, don't buy the lubricated kind. They slip right off the railings."

However, we didn't pick this year's winner for tackiness. We chose it for its purely whimsical nature. The coveted 1995 Urchin Award goes to Global Dive Adventures for their inflatable diver (pictured). To order, call 1-800-214-4524. Ask whether it's shipped in a plain brown wrapper.

eliminate fluid drag by slimming down BC bladders, removing unnecessary buckles and clips, and making BCs smoother all over. D-rings were bad-mouthed because manufacturers were afraid that some fool might attach something heavy to a BC that couldn't be ditched easily or willingly (a bag full of abalone, for example), thereby drowning a customer and/or creating a legal mess. I have several recent BCs that have literally no fastening points on them other than useless little key clips in the pockets.

The technical and cave-diving community has changed all that by creating a ready market for so-called "technical" or "working" BCs. Several manufacturers, such as Zeagle, Dive Rite, and Sea Quest, displayed BCs covered with D-rings, buckles, clips, and other fastening points; harnesses for double tanks and even supplemental tanks for you deep, mixed-gas fanatics; fully redundant flotation systems with double bladders and inflators in case one ruptures; and other doo-dads.

Technical BCs probably aren't suitable for the average recreational diver, because they are big, heavy, and unlikely to fit in an airline carry-on bag. Lugging one of these BCs on an ordinary coral reef dive trip would be like wearing your shoes in bed: possible, but not very comfortable, and definitely clunky. As you might expect, they look mighty macho. You're not likely to see a pink technical BC in the near future; dead black is de rigeur. Frankly, given this last year's safety record for cave and deep technical dives, I'd make them in day-glo orange so that they could be easily recovered by underwater search-and-rescue personnel.

On the other hand, in my working dive days I would have loved one of these because I could hang my tools and extra camera bodies on all those rings, leaving my hands free to collect biological samples in jars. Now, those were the days when a marine biologist could pillage a reef with a hatchet and nobody would insult him on the dock; they'd just want to look at the skeletons of the corals after he'd bleached them, and know what the scientific names were. Gee, I'm glad those days are gone.

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Another interesting change in BCs this year was that a number of products debuted with weight pockets and more than a single release. Last year, I reviewed the U.S. Divers Alcyone (*In Depth*, Nov. 94), which has a separate release for each pocket. At DEMA, I saw several BCs that seemed to be derived from the Alcyone, with individual Velcro releases on each side. As before, I think a single release is safer, but I'm diving an Alcyone and not worrying much about it. I don't think it should take more than another second to pop both pockets separately. Maybe that's just a rationalization because it's so comfortable.

Delmar Mesa

Contact Lenses

Many scuba divers use soft contact lenses successfully. Unlike hard contact lenses, they don't encourage bubble formation in the eye, and they stay in place if a mask floods.

You don't believe it? Well, the South Pacific Underwater Medicine Society reports that a researcher recently glued threads to contact lenses and found that although hard lenses popped off easily, considerable force was required to pull soft lenses from his subjects' eyes. He then fitted snorkelers with both hard and soft lenses and had them keep their eyes open and blink frequently. The hard lenses fell out within 60 seconds. The soft lenses stayed in place.

So forget those expensive prescription lenses. Stick with your soft contacts, especially disposables. If by rare chance you lose one, pop in another.

Pelican Brief

After ten years of toting photo gear, the snap on my Pelican case broke. In response to Pelican's lifetime guarantee, I returned it, asking them to either repair it or send me a new one. A couple of days later I received a call on my answering machine saying it was my choice: they could either repair it or send me a new one. I was out of town, so I didn't respond. But Pelican, rather than dallying, took the high road and shipped me a new replacement, fully honoring the guarantee. Pelican — your lifetime guarantee gets my lifetime business.

C. C.