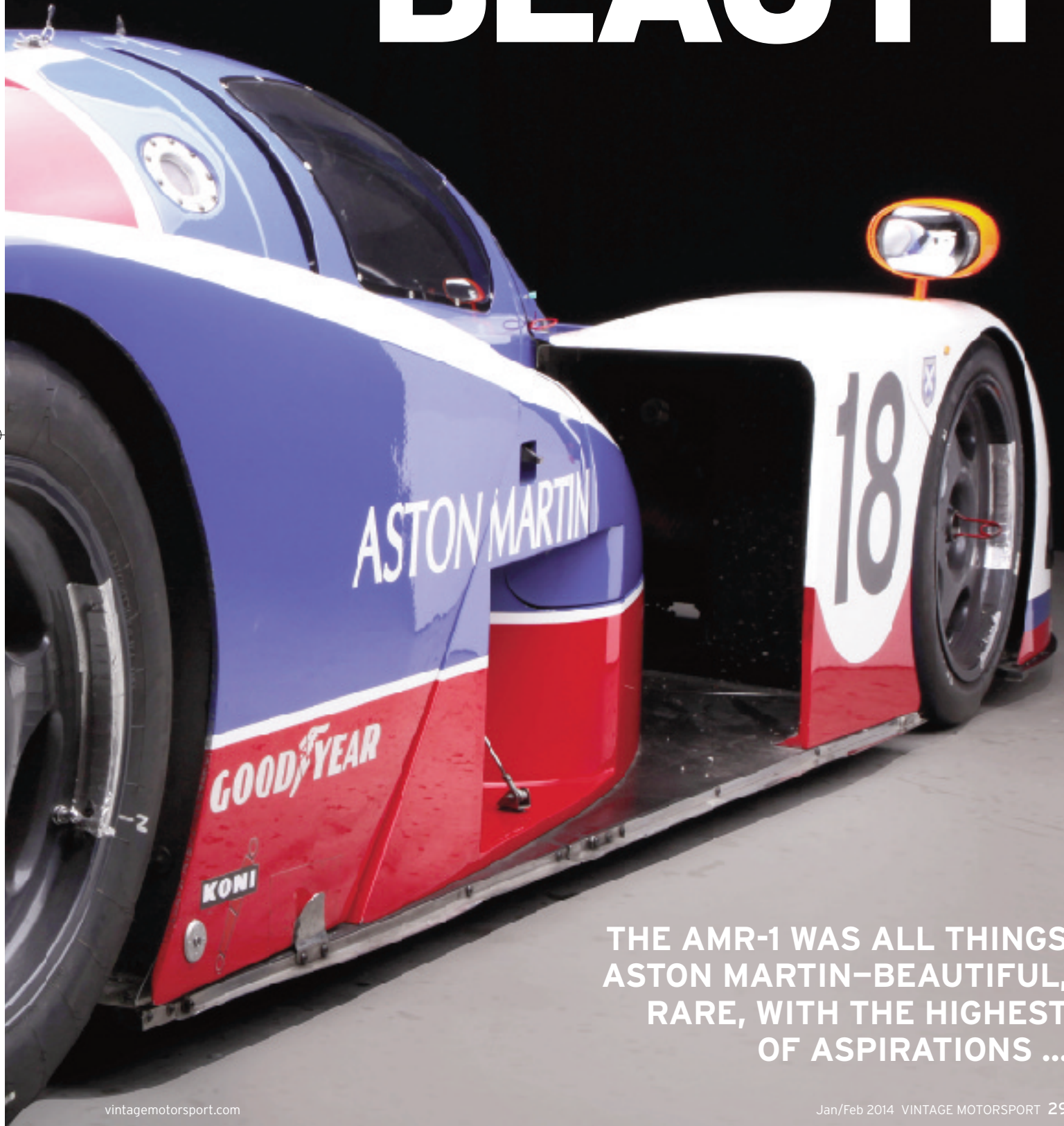


1989 ASTON MARTIN AMR-1

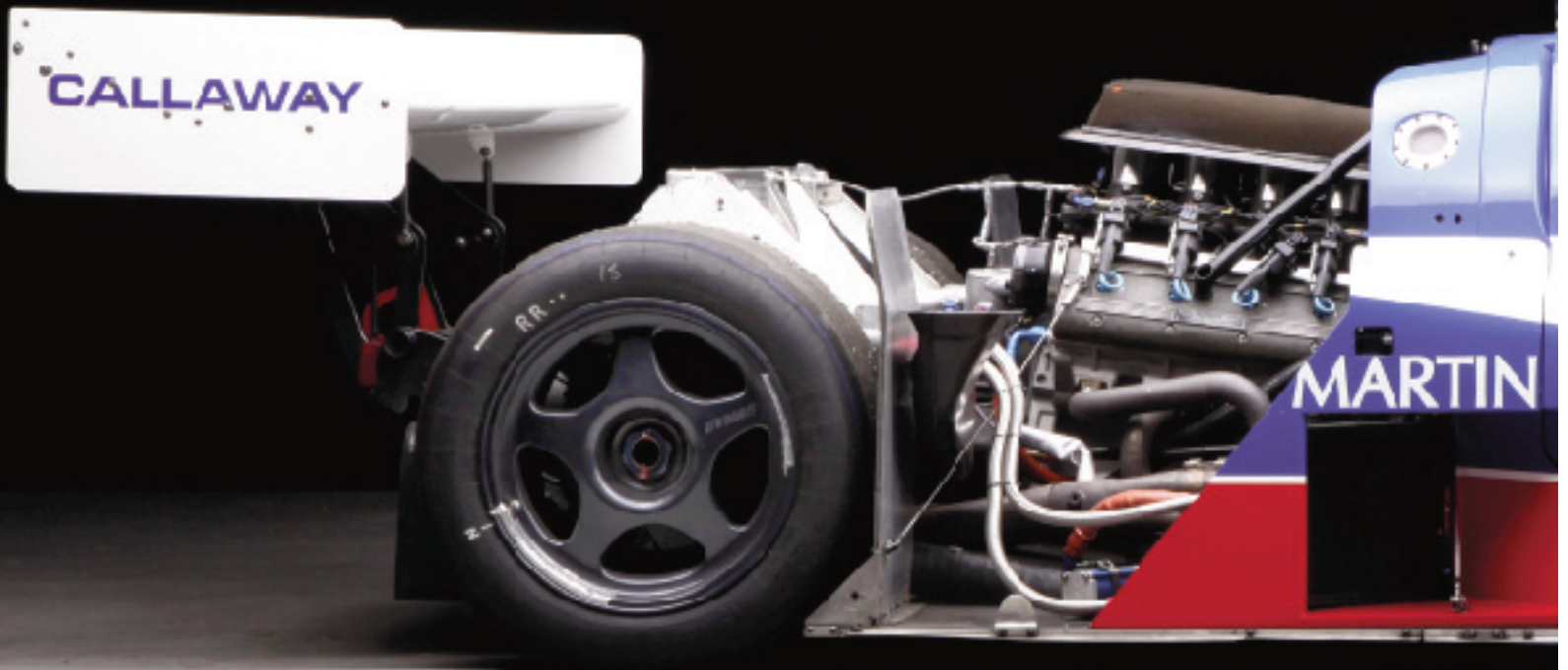
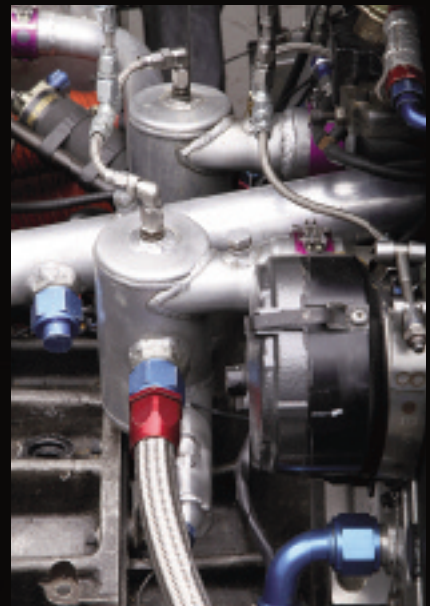
CALLAWAY

BY TED WEST | PHOTOGRAPHY BY DON HEINY

BEASTLY BEAUTY



THE AMR-1 WAS ALL THINGS
ASTON MARTIN—BEAUTIFUL,
RARE, WITH THE HIGHEST
OF ASPIRATIONS ...





As we approach legendary Aston Martin's 100th anniversary, the name conjures bright images: "The Right Crowd, and no crowding" ... Speed Trials at Brooklands ... victories at Le Mans ... James Bond implausibly vanquishing all evil.

And in the late '80s, the home office at Newport Pagnell felt it was high time they showed the flag again in racing. There had been unofficial testing of the waters in the early '80s with Ray Mallock's Aston Martin Nimrod V8s. Then in 1987, Aston Martin, like Jaguar, Bentley, Rolls-Royce, and many others, were consumed in an unprecedented buying spree. Aston and Jaguar were both bought by Ford—with telling consequences.

Aston Martin was already planning its AMR1 Group C racer. Funded in 1988 by automotive magnate Peter Livanos (who sold Aston to Ford), the AMR1 would be designed by Canadian Max Boxstrom of Dymag Wheels. Well-known Ecurie Ecosse would develop the car under the direction of Hugh McCaig, Ray Mallock and Richard Williams. A stock-block Aston Martin V8 of



700hp would be devised, its two-valve heads replaced by four-valve heads designed by Reeves Callaway in Old Lyme, Connecticut.

Ecurie Ecosse's relationship to Aston Martin would be similar to the successful relationship between Jaguar and Walkinshaw Racing. Newport Pagnell meant to return to the glory days of the '50s, when team manager John Wyer led Aston to victory at Le Mans. Chairman Victor Gauntlett said it outright, he would far rather win Le Mans and lose the championship than vice versa. A high goal indeed.

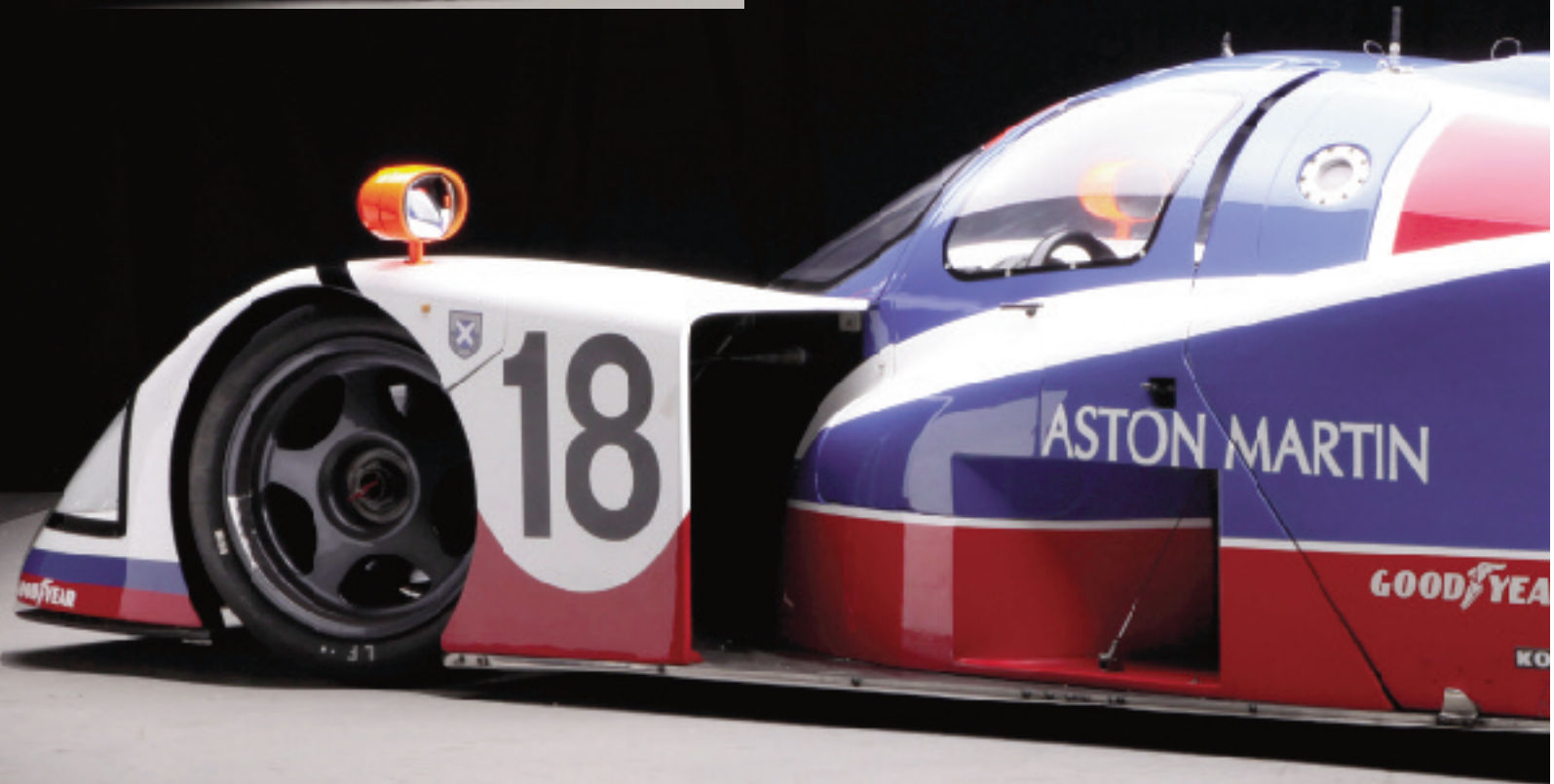
The AMR1 was new from the ground-up, which is both expensive and vastly time consuming. Yet it virtually had to be cutting-edge to battle the might of fully developed racers from Jaguar, Porsche, and Mercedes-Benz. Accordingly, Boxstrom set about designing a car that would take maximum advantage of current ground-effects technology. The car had a massive aero tunnel running from amidships to the rear. The engine was even angled three-degrees upwards at the rear to create a "pure" tunnel. The front of the car also





PAUL BONNER

Brian Redman reunites with the AMR-1 at Monterey.



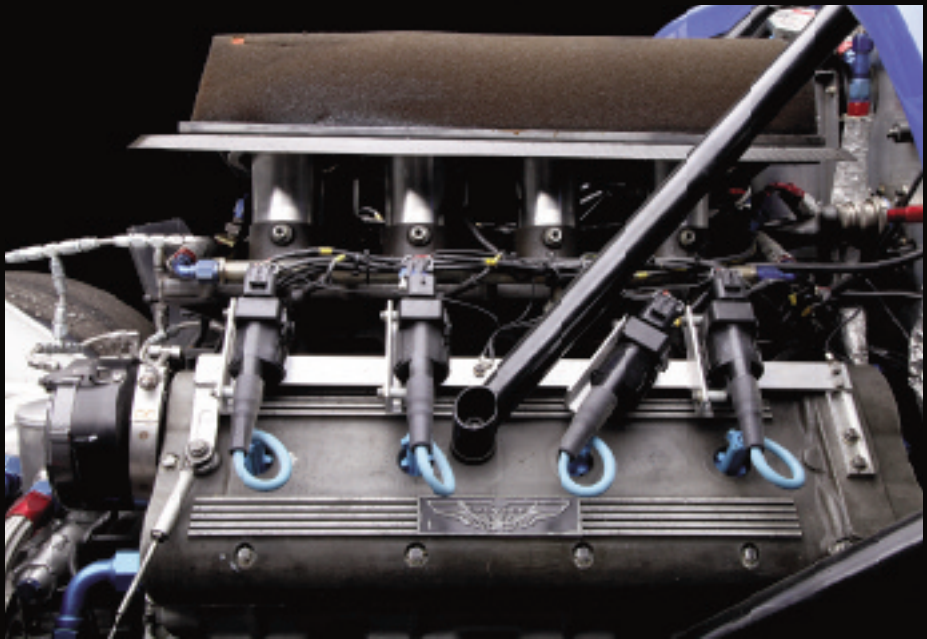


benefitted from ground-effects design, and testing in a moving-ground wind tunnel confirmed the design's downforce.

The tub was built of Kevlar and carbon-fiber, with the radiator mounted at the rear and massive air inlets along the car's sides. A large rear wing provided adjustable downforce. The tub was extremely modern for its day, essentially a narrow F1 tub-like carbon-fiber driver's compartment beneath the outer skin, allowing forward ground-effects channels at the nose. Boxstrom's front suspension followed F1 practice, with almost no travel. Massive downforce was to press the car to the surface.

In America, Callaway Engineering worked with a range of 5.0- and 6.0-liter engines, but the smaller engines were dropped in favor of the 6.0-liter Le Mans configuration. It developed a highly reliable 700hp at more than 7000rpm.

Building a car in which every



component is newly designed caused delays in testing. The transmission, for instance, fitted between the engine and final drive, was unique to the Aston. The car's final dimensions were 188 in. long, 78 in. wide, and 40 in. high. A 100-liter fuel cell was fitted, with a reserve of 6.5 liters.

Early testing was the usual nit-mending exercise, but the car seemed promising. And Peter Livanos' hefty £26-million

racing budget discouraged no one. At its first race at Dijon in May, 1989, the car would be driven by endurance veteran Brian Redman and Scotsman David Leslie. Immediately, there were terrible troubles.

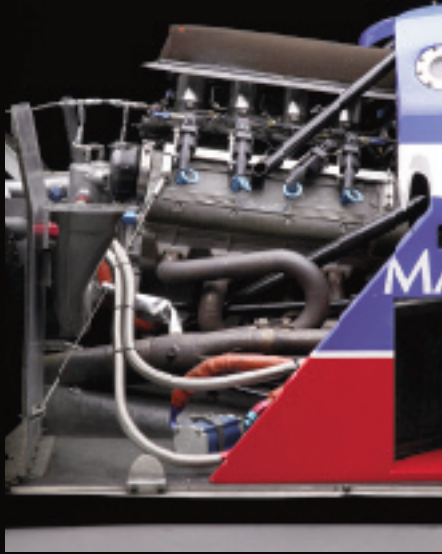
Bumpy Dijon, unused for 10 years, exposed the AMR1's greatest design fault. Redman recalls today, "It was just terrible. The rear suspension was designed with no 'droop' [vertical travel], and over the



bumps, it was all but undriveable.” Already far behind due to two unexplained engine failures in testing, at Dijon it underwent the most fundamental chassis re-sorting. With far too much drag inducing downforce and vile handling, it qualified 18th and finished 17th—with Le Mans in only three weeks.

A wrangle in the team resulted in the release of designer Max Boxstrom. Some rear suspension travel was built in and the car improved measurably. AMR1/01 and AMR1/03 would contest the 24 Hours. Gorgeous as ever, the Astons definitely looked the part. But with Jaguar, Mercedes-Benz and Porsche streaming down Mulsanne at 240mph, the drag-burdened Astons were limited to 215. AMR1/01 qualified 35th and AMR1/03 43rd.

The Astons held a steady race pace, moving up the order as faster cars failed. And spectacularly, in mid-race, AMR1/03 was credited with the fastest race lap! But the French scorers had mistakenly scored both cars as one. At 2:30 a.m., 03's engine grenaded at Mulsanne Corner. Meanwhile,



01 soldiered on, Redman enjoying himself. The Brit fans at Arnage Corner held up a sign: “Give us some oppo!” Next time around, he slid hard, plenty of opposite lock. Then the sign read, “Now fastest lap!” He did what he could. Finally, the sign

read, “Tea and crumpets with the Queen!”

Redman, Costas Los and Michael Roe co-drove AMR1/01 to a creditable 11th. After trying since 1967, it was the first time Redman ever finished Le Mans. “We had wonderful downforce—I could run with the fastest Mercedes all the way through the Dunlop Esses and Tertre Rouge. But on Mulsanne Straight, they simply vanished.”

AMR1/04, the beautiful Salon car in the photos, proudly owned by New Yorker James Freeman, was finished in time for Brands Hatch, placing 4th, then 8th at the Nürburgring, and 6th at Donington. AMR1/05 was 7th at Donington, 7th at Spa, and 8th in Mexico. The car had all the legendary beauty and power of an Aston Martin. And Redman rated the Callaway engine “extremely good.” But the car's excessive downforce and drag could not be redressed. A new 1990 body with half the drag was prepared, but alas, Ford already had one Group C competitor—Jaguar. One was enough. Crestfallen, Aston Martin was forced to step down, gallantly ready to do more, and far better. 