### EARSHOT

61

editor J. Burden

journal of GEC AVIONICS-Borehamwood



### R.A.F. Prepares for Foxhunter in





As a prelude to the arrival of Foxhunter (Al.24) in service in the R.A.F. Tornado, four of the R.A.F.'s most senior engineers visited Milton Keynes recently — Air Marshal Sir Eric Dunn, KBE, CB, Chief Engineer R.A.F., Air Commodore B. R. L. Easton, Director of Aircraft Engineering, Air Commodore G. I. Firenczy, Director of Electronics Radar (Airborne) and Air Commodore A. W. Jones, Command Electrical Engineer R.A.F. Strike Command.

All these senior officers are responsible for the maintenance of Tornado F2 and its Foxhunter radar about to enter service at R.A.F. Coningsby.

After a briefing on the development, production and in-service support of Al. 24, the visitors were shown the wide variety of automatic test equipment being developed for the R.A.F., as well as the radar support bays at Milton Keynes. They were then taken to the Company's trials facility at R.A.E. Bedford, where a based Al.24 radar was demonstrated against airborne targets. The radar worked perfectly - but an illtimed blizzard cut short our specially arranged Canberra sortie and seemed to sweep almost all other targets from the skies. However, video recordings showing Foxhunter in action, in both development and production Tornado



F2 aircraft, were shown — including a sequence taken during the Tornado F2 aircraft's first live firing of a Skyflash missile, when a direct hit was scored on a Jindivik target.

Airborne Radar Systems Division has delivered all the radars of the preproduction batch and are now producing the radars of the second batch.

The production radar has been fully checked out and meets the R.A.F.'s minimum requirements giving a consistently high performance. It gives them

for the first time the ability to detect at long range multiple targets at low level without the target aircraft becoming aware that they are being tracked.

The R.A.F. have further disclosed that Foxhunter (Al.24) is already achieving seven to eight times the reliability of the radar in their Phantom fighters.

The visit was extremely successful in confirming to senior R.A.F. staff that GEC Avionics is now fully committed to the support of Al.24 as it enters service with the Royal Air Force.



### Congratulations: Congratulations: Congratulations

Pauline (Mrs Pauline Lyon) left on 1st February 1985 to have her baby or could it be a Lyon cub — and we all wish her the best of good fortune in her new role as Mum.

Pauline appeared on the first floor in her single days with her sister Angela, the famous McDonagh sisters, but commenced her job as assistant to Betty Manning on 13th December 1982. In 1983, 5th April in fact, she took over as Secretary to Mr D. Jackson, our Chief Executive, and carried out that task impeccably until she left.

Apart from being an attractive happy person Pauline's hobbies cover Squash and Golf (a recent one) and watching Football — she is a great supporter of Tottenham Hotspur.

All her friends and colleagues got together and provided some appropriate presents amongst which were a High Chair, Cot Quilt, Baby Clothes and Soft Toys.

When he presented Pauline with her card and presents Derek Jackson said she was the best secretary that had ever worked for him — well you can't say better than that.

All our best wishes to you Pauline and your family.







# & Best Wishes for a Happy Retirement

Mrs Marie Nettleton retired on 1st February 1985 after 19 years service with the Company. Marie started her career in the Airborne Computing Division in 1966 and joined GEC Avionics Accounts Department in 1969.

During her last 5 years she was promoted to Admin. Assistant to the Chief Accountant and the presentation of a Gold Bracelet among many other presents from her friends and colleagues testified to her popularity, and we wish her a long and happy retirement.



Mrs 'DOT' Root retired on 1st March after nearly 24 years service with the Company. For the last 18 years she has looked after the Stationery Stores, serving all sites at Welwyn Garden City, Milton Keynes, Radlett, Hemel Hempstead and all the various Avionics departments at Borehamwood.

Her sense of duty was boundless, she was never ill, and did not take her full holiday entitlement for quite a number of years. Her work rate was an example for all to follow.

She will be greatly missed by all she served so well and her knowledge of the current state of Company documents will also be sorely missed.

Upon her retirement her colleagues presented her with cut-glass brandy goblets and matching whisky tumblers since it is well known that Dot has a great appreciation of the 'finer things of life'.

We all wish Dot the best of luck, health and happiness in her retirement.



On the 20th September, five intrepid sailors donned gymslips and stockings to take on the best (worst?) of Milton Keynes raft fraternity.

The event was a sponsored raft race in aid of Willen Hospice and as preparations got under way, some thirteen teams from the area had entered.

The first problem was of course, the crew. Cap'n Janet Wellard, aided and abetted by "Pegleg" Penny Richards, pressganged two strapping young men, "Sea Dog" Steven Bishop and "Randy Andy" Wymer. The fifth crew member, an ancient wreck by the name of Jim Nicholson, willingly offered his services and was immediately promoted to first mate.

Thus staffed, the next problem was building the raft. Rules specified that the raft must be a true raft, with no metal fixings, i.e. nuts and bolts. This meant lashing together what raw materials were obtainable with rope. Luckily, four oil drums were acquired from outside the front entrance, where a road crew were building a dual carriageway. Various lengths of plank were gathered from around the site, and the all important rope was provided by the 'quartermaster' Richard Hollingdale, who also supplied a pair of very useful paddles.

The raft was lashed up (true) on the Saturday afternoon before the race. However, certain alcoholic beverages had been consumed beforehand and under more sober conditions the vessel was hastily part re-assembled to make it seaworthy!

Fancy dress was also part of the race conditions, (though optional) and an appropriate theme was being sought. Originally, natives were the idea, and Jim's pair of black tights were prominently displayed in his area during his absence, and labelled "Jim's Tights". Cap'n Wellard had problems making the grass skirts however, and amid fears of a 'racist' accusation, the idea was dropped. Next suggestion was Chinese, with the raft christened "The GEC Junkies", but for simplicity of dress (and a chance for Andy to wear stockings and suspenders) the event theme was that good old stand-by, St. Trinians.

The big day arrived, and come 5 o'clock, the crew members were busy dressing for the part. Janet and Penny looked particularly fetching, as would be expected, but somehow the same could not be said for Andy and Steven, despite the stockings and short skirts. Jim, on the other hand, really looked the part complete with straw boater and plaits.

# Navy \* \* bark

Though I don't know how many St. Trinians girls had snowy white moustaches!

The raft, safely transported to the site of the race by "Our Man in the R.A.F.", Graham Haggar, was named (highly original this) the Good Ship Lollipop, and a prominent sign was displayed, flag like, for all to see, complete with the footnote: "Sponsored by the GEC Tenner". Yes

MAT Transport had, of course, hopped on their canoe and paddled off into the distance, followed by The Law, while our lot got themselves sorted out and sat comfortably in third place. Safely afloat and underway, Cap'n Wellard ordered her crew to open fire, and flour bombs were seen to hurtle in all directions, so those that reached the bank were generously returned by the hooligans among the GEC supporters.

At the half way stage, The Good Ship Lollipop met the MAT Transport raft coming back, complete with new crew!



folks, our brave band of seafaring (well, canal trippers really) naval types, had been generously sponsored by Mr. GEC himself for ten whole oncers!

The route of the race ran from a point in Great Linford village to a well known hostelry, The Black Horse, situated approximately half a mile further along the canal. The opposition began to arrive, but the craft belonging to MAT Transport was way outside the rules. Two canoes, sealed over with glass fibre. and four seats bolted securely together in a steel frame is hardly the kind of thing Robinson Crusoe could have knocked up on Fridays day off. The Police team, also bent the rules by constructing their rather more raft-like conveyance in a sturdy fashion, using nuts and bolts. At least the only other two teams to turn up, MK Architects and The Nags Head, had obeyed the rules. Heavy rain throughout the day had obviously put off the rest of the entrants, but not our hardy bunch.

There were plenty of enthusiastic supporters, mainly our lot, and the tension mounted as the participants lined up for the "le Mans" style start. At the sound of a horn, our pleated skirt pirates sprinted (well, jogged) for their raft and after some problem getting stuck in the mud, they had launched themselves on their epic journey.

Needless to say, several flour bombs were launched and suffice to say that Lollipop ruled OK!

Cap'n Wellard and her crew sailed in third, but won the honours on the day as they were presented with four bottles of champers, one for raising most sponsorship money — £115, (thanks to everyone who contributed), one for best fancy dress (only), one for best raft, and finally one for guts! (or sympathy?) You could say our crew had a lotta bottle!

The post race drinking session (censorship in evidence here) was enjoyed by all, especially a shirtless Andy Wymer who, like many others, was in a rather delicate state the following day.

But questions still remain. Did Andy give back the suspenders? Was Steven really-seen in Boots buying a jar of Immac? Has Jim removed the staples from his socks, or has he always walked like that? Why won't Penny come to work in a short skirt? Were those really Janet's legs, or skin tight flesh coloured jeans? But most importantly, has the idea of a raft race sparked off enough interest to hold our own GEC event next year? Could be splashing good fun!



### **EDITORIAL**

Fifteen years ago, almost exactly, Earshot was born and I can legitimately claim the paternity of this baby. In those early days Elliott Automation Radar Systems Ltd. was ten years old, and we were looking forward to continued expansion and success although the large projects in which we are now involved were not ours. In fact we were still reeling under the blow of the cancellation of the then A.E.W. project, and the prime object of Earshot, at that time, was to try to bind us together as a team and boost our fighting spirit so that we could bounce back. I believe Earshot did boost morale then and has continued to do so by improving communication throughout the Company. In those days of course, because the work load was down people could devote time to writing for the paper and, in fact we at times, had to reduce articles to a manageable length - so far did the pens of our contributors run away with them! But all that was good and helped to make the paper, which I am sure did help us when we were at a pretty low ebb. Peter Mariner. then our Assistant Managing Director, was featured and wished the paper well in that first issue.

Our initial steps in production were somewhat faltering - indeed I know mine were, but we learned as we went along and the second issue of May 1970 went from two column to three column format, which was an improvement. In that issue we reported export orders and deliveries in EARS jumping to an all time high in the 12 months to March 1970 -orders reaching £250,000 more than 21/2 times the previous year's figure and deliveries reaching £210,000 which was three times the 1968/69 figure. Fancy that - how paltry these figures now appear by today's prices and in comparison with Avionics' present ones. Also we had 1150 people then, and were working in 180,000 square feet as opposed to our present 3250 people and 700,000 square feet. We also included an article about our then Technical Director, Dr Betty Laverick, to whom I had the good fortune to report. Two years later the Company changed its name and the paper appeared in April 1972, issue number 25, as the journal of Marconi Elliott Avionic Systems Ltd. and continued under this name until November of that year when issue number 30 appeared as the journal of Marconi Elliott Avionics Borehamwood, In March 1973 issue number 34 featured the visit to Rochester of the Right Honourable Mr Michael Heseltine, then Minister of Aerospace and Shipping - he said, "Marconi Elliott Avionics is a very impressive Company . . ."



In 1974 we were subjected to the three-day week but managed to work a five day one and our Spring issue, number 38, reported development of a new interception radar the A.I. and the award of the C.B.E. to Dr O'Kane. By this time the work in the Company had increased so much that people found it difficult to devote time to contributions for Earshot and I could not maintain a regular schedule, which had to be reduced from a monthly issue to every other month. 1974 saw the introduction of the Health & Safety at Work Act and the May 1975, issue number 41, featured the New Safety Award, which we had won. At the end of that year we reported the fact that the Company had won five Queen's Awards.

Issue number 43, Spring 1976, reported the A.I. go ahead for full development and the build up of the A.E.W. System in Bay 6, Warwick Road. In March 1977, Mr Mulley announced that the Government intended to go ahead with full development and production of the A.E.W. This, of course, was Jubilee Year - and Virginia Wade won the Ladies' Championship at Wimbledon! In 1978 the factory at Eaton Road, Hemel Hempstead, was occupied, and on 1st April the Company changed its name to Marconi Avionics Ltd. In 1979, issue number 47 reported the build up of Avionics in Hertfordshire which continued apace and staff were recruited. In issue number 48, Autumn 1979, we also reported the award to us of a £20 million contract for the initial production of the Airborne Interception (AI) Radar for the Air Defence variant of the Tornado aircraft and Terry Duffy, National President of the Amalgamated Union of Engineering Workers, visited us. The August 1980 Special Issue was headlined "Into the 80's" and reported achievements over the previous ten years — annual sales £5 million to £62 million, order book £5 million to £170 million — people 1112 to 3208 and space 155,000 sq. ft. to 545,000 sq. ft. — fairly impressive.

Spring 1981, issue number 49, saw the switch on ceremony at Radlett — the A.E.W. System being switched on by Air Chief Marshal Sir Douglas Lowe and issue number 50, Autumn 1981, headlined the award of the British Empire Medal to Jack Unwin, the Chairman of the Shop Stewards Committee at Borehamwood, in the Queen's Birthday Honours List. In this issue also we introduced the new design for the heading of the paper and a new typeface which improved its appearance - a goal towards which I was striving throughout. Issue 51, Winter 1981, featured such varied items as the success of the Carol Service at St. Albans Cathedral, the visit of Air Marshal Sir Peter Bairsto, Deputy Commander in Chief Royal Air Force Strike Command, and the development of a radar to sense the level of coal in underground bunkers for the Coal Board. Issue number 53, Summer 1982, highlighted distinguished visitors such as the Controller of the Navy Admiral Sir Lindsay Bryson, the Deputy Chief of the Defence Staff (O.R.) Lieutenant-General Sir Maurice Johnston, and featured some excellent photographs submitted by the Photographic Section of the Social Club plus the retirement of Commander MacIntyre, Security Controller.

In issue number 56, Spring 1983, the delivery of signal processing equipment to the Royal Navy was reported with pictures of the vehicles leaving the factory at Welwyn Garden City. Issue number 59, Spring/Summer 1984, featured the picture of Derek Jackson as Chief Executive, and reported the retirement of Peter Mariner, whom we all miss. On 2nd September 1984 the Company name was changed to GEC Avionics Ltd.

Which brings me to this issue — number 61, Spring 1985, fifteen years later. Where has it all gone? A great deal has happened — achievements, disappointments, shocks, etc., etc. Earshot has flourished — improved out of all recognition and is now well supported by its contributors. Production is more slick and a better product has emerged. I am proud of the paper and will always regard it with some affection.

This is the last issue I shall edit as I

The National Young Employees Competition

Twenty young employees from the Avionics sites, who had participated in GEC's 1984 National Young Employees Competition, were presented recently with Certificates of Merit by Derek Jackson at the Training Department, Kenwood House, Borehamwood.

A pilot competition in 1983 had prompted considerable interest, particularly from the Apprentice Association and two teams were entered. Such was the enthusiasm that four teams from the Avionics sites were entered in the 1984 competition, to compete with 92 other teams from GEC Companies throughout the country.

A conscious effort was made to ensure that our participants were fully representative of the varied backgrounds, locations and working environments that make up the Avionics sites—a point confirmed by our 'all girl' team which was one of only five entered in the event.

The 16 hours of competitions in central Wales, although physically challenging, were essentially designed to develop the participants' powers of leadership, team building, communication, delegation and commitment. The activities ranged from the familiar —map reading and orienteering — to the less familiar — archery, rifle shooting and bridge building and included the completely novel, such as survival exercises and mountain bicycling.

At the presentation, the competitors commented on their considerable

sense of achievement at having completed exercises that they would normally have considered beyond their abilities.

The contribution of the four Team Managers should also be acknowledged. As well as their vital role in creating and maintaining a team from four individuals they were also responsible for matters such as training, transport, equipment provision, budget submission, local publicity and general administration.

Plans for the 1985 competition are well advanced and the Avionics sites, building on past experience and the enthusiasm of its young employees, can look forward to further positive and worthwhile participation in the event.

continued — Page 6



Derek Jackson presents Michele Terry with her certificate.



David Lidbetter.



Francis Beck.



Peter Syers.



From left to right: Nicola Barnett, Hazel Barrett (Chiltern Radio) and Karen Fogden.

retire from the Company on the 24th May. I must thank all my agents and contributors, the staff of Central Publications, Ted Harmsworth, George Steward, Barry Dearmer for his excellent cartoons, and above all Sue Hall, now self employed, for her superb artwork. Thank you all it has been great fun. It's a strange feeling knowing that I shall now

not be associated with the paper, but whenever I read a house journal in future I shall know what headaches lie behind the pictures and the printed page.

Keep the flow of pictures and copy going and keep Earshot going — it's your paper, about your life in Avionics here and it keeps us all in touch with each other.

So thank you for your support and I wish Earshot and everyone in Avionics every success in the future.

J. L. BURDEN Editor.



### In Remembrance

#### FRANK STEWART

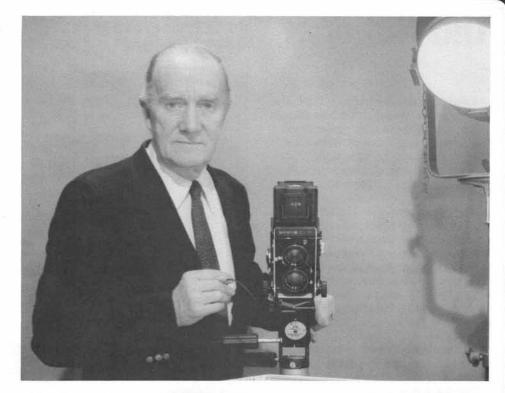
An old and valued friend and our accomplished photographer died on 2nd February of this year. Frank had been ill for a short time but to all intents and purposes had recovered and was looking forward to his retirement. It was a severe shock to all of us.

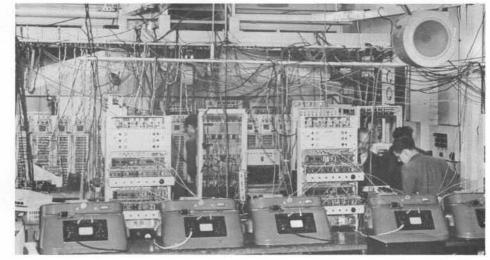
Frank joined Elliott Automation on 28th February 1949 and so at his death he had served for very nearly 36 years quite a stint. He was of course well known to all and was friendly and helpful to everyone. His pictures of equipment, events, visits, families day's, etc., are renowned and he provided me, as Editor of Earshot, with great support and many memorable shots which are now fixed in the back Earshot issues. The picture we have included here is one from about 1949/50 of I believe one of the earliest computers on test. This picture was taken by Frank using a camera without a shutter, and flash powder!

Prior to joining Elliott Automation Frank had served in the R.A.F. Regiment and during the Battle of Britain was involved in the Anti-aircraft defence of airfields in Kent. He leaves his wife Joyce and family of a son, Colin, and two daughters, Gwen and Linda. Joyce and Linda both worked for the Company and Colin, an apprentice at Manor Way, still does. We extend to them our sincere sympathy in their loss.

J.L.B.







continued from Page 5

#### NATIONAL YOUNG EMPLOYEES COMPETITION PRESENTATION -28th-30th SEPTEMBER, 1984

#### (1) TEAM 84

(2) **TEAM 85** 

Team Manager: Peter Syers (Senior Section Leader) Team Members: Nicholas Clarke (Elec. Craft Apprentice. Yr 3)

> John Oliver (Elec. Technician Apprentice, Yr 3)

Robert Wild (Trainee Valve Technician - Ex YTS).

Team Manager: Robert Muller (Section Leader) Team Members: Oliver Lynch (Elec. Technician Apprentice, Yr 4)

Dennis Nelson (Elec. Technician

Apprentice, Yr 4)

Peter Salsbury (Elec. Craft Apprentice, Yr 2).

#### (3) TEAM 86

Team Manager: Nicola Barnett (Senior Engineer) Team Members: Sandra Coombs (Commercial Trainee)

Karen Fogden (Cost Clerk) Gillian Simpson (Elec. Technician

Apprentice, Yr 2)

Michele Terry (Junior Project Cost

#### (4) TEAM 87

Team Manager: David Lidbetter (Engineer) Team Members: Phillip Berkley (Trainee Technical

Writer, Yr 3)

Gregory Birch (Industry Based Student,

Nicola Birch (Secretarial Trainee) Lorraine Burgess (Junior Administration

National Publicity Co-ordinator — Derek Lamb (Senior Engineer) Compeition Consultant - Eric Bridgestock (Group Leader)

### VISIT



Left to right: T. Rees-Roberts (GEC), I. Fraser (GEC), Lt. Cdr. Alan Hoskins — WEO, S. Nugent (GEC), Lt. Lee Tindall-Jones — DWEO, Commander Martin MacPherson, Lt. David W. Frise, Lt. Cdr. David J. Cooke, D. Brazier (GEC).

# Captain and Officers of HMS Trafalgar



Commander MacPherson being shown equipment by Chris McDermott of Special Projects Division.

The Special Projects Division of GEC Avionics Limited was host for a visit to their Welwyn Garden City site by the Captain, Commander M. D. MacPherson R.N., and four Officers from HMS Trafalgar on 5th March 1985.

Commander MacPherson asked to visit the Division as his submarine is fitted with towed array sonar processing equipment supplied to the Royal Navy by the Special Projects Division and, he and his team, wanted an opportunity to meet the people involved in the design and manufacture of the equipment which he is using successfully at sea. He took the opportunity to discuss, informally, with members of the Division, possible changes to the equipment to add to its performance.

During their visit, the Officers from HMS Trafalgar were able to see a demonstration of adaptive processing equipment and to visit the production and test facilities at Welwyn Garden City.



### Letter to the Editor:

L. M. CHENG - MECHANIC

Les Martin wrote to Ozalid for a quotation for some drawing office equipment and obviously signed himself Les Martin – Ch.Eng. (Mech). Some very strange body interpreted this rather differently as the following letter shows:—

GEC Avionics ARSD Elstree Way Borehamwood Herts.

For the attention of: Les Martin Cheng (Mechanic)

our reference EARM/HS Brick No. 530



At the request of our representative Mr C. Wheeler we have pleasure in enclosing our quotation for Drawing Office Equipment.

We trust you will find this quotation of interest but should you require further information or advice either our representative Mr Wheeler or the writer will be more than pleased to assist.

Yours Sincerely for OZALID (UK) LIMITED

EAR-MORAN

E A R MORGAN Sales Administration London North

It is hard to believe that the letter came from Loughton in Essex and not from outer Mongolia! The filing system appears also to be somewhat strange the reference is BRICK No. 530. The mind boggles — I wonder what the other 529 were??!!

J.L.B.

## A Key Suggestion

On 29th March 1985, Mr P. L. Harris presented a cheque to Mr S. Beldzik, a security guard at Milton Keynes, in recognition of an idea put forward under the Company Suggestion Scheme.

Stephen Beldzik's suggestion was for a bracket to be used, with a padlock, to secure filing cabinets whose locking bars have been left incorrectly positioned. The device is now in use at all sites of the GAv Borehamwood establishment and everybody is warned accordingly! A visit to the Security Office may be embarrassing.

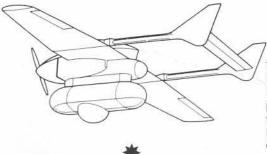
The Suggestions Committee is always glad to receive details of novel and practical ideas put forward by employees, who receive a monetary award for suggestions which are accepted. Any ideas you have for improving productivity, reducing costs, or extending our product line, should be sent through the internal mail to Mr P. L. Harris, using the forms available at all sites.

### :NEWS RELEASE

NEW MANAGING DIRECTOR FOR GEC COMPUTERS LIMITED Paul Rayner, from GEC Avionics, shapes his team

GEC Computers Limited now reports to GEC Avionics Limited, as does GEC Software Limited. In a management reorganisation in GEC Computers, Mr P. B. Rayner has been appointed Managing Director.

Paul Rayner, 49, who founded GEC Avionics export-winning Maritime Aircraft Systems Division at Rochester, had also been Divisional Manager of Airborne Computing Division, before its amalgamation into Airborne Display Division. He had previously been a member of the Elliott Computing Division at Borehamwood, from which GEC Computers was formed. He has, therefore, played a leading role in the development of digital technology and its successful application.



His first action has been to structure GEC Computers into three operating Divisions as profit centres, each responsible for the products appropriate to its marketplace, and with resources dedicated to customers' requirements. "My aim is to ensure successful products and satisfied customers. To do this I am identifying individual responsibilities within the company more clearly, both for products and performance", he has stated.

#### "PHOENIX" PILOTLESS AIRCRAFT CHOSEN FOR BRITISH ARMY

GEC Avionics has been selected by the Ministry of Defence (Procurement Executive) as prime contractor for the British Army's new PHOENIX remotely-piloted surveillance system. The selection has been made following a Ministry-funded competitive study which included flight trails jointly conducted in conjunction with Flight Refuelling Limited of Wimborne, England. A fixed price contract of around £80 million for development and production has now been awarded.

PHOENIX, the Army's first fully-equipped pilotless aircraft system for real time remote targetting and bat-tlefield surveillance, comprises a small air vehicle with advanced avionics and infra-red imaging system, an air/ground data link, a mobile ground station and logistics vehicles for launch and recovery.

NEWS RELEASE: