

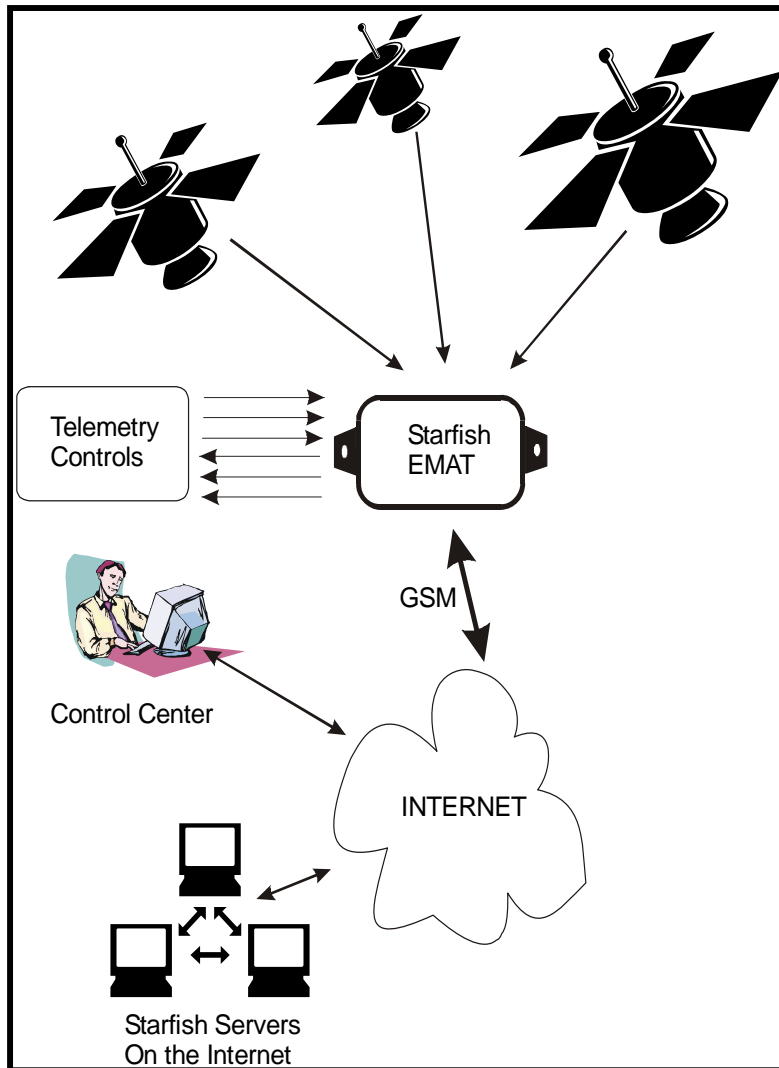
STARFISH eMAT

Enhanced Mobile Asset Tracking – With Telemetry

Mobile Asset Tracking, the ability to be in constant touch with your assets that are constantly in motion is an invaluable tool, if it can be economically realized. Starfish, the newest product in the market today, will help you keep in touch with your mobile assets. It uses the latest in GSM technology in combination with the Global Positioning System, to make this a reality.

Starfish does more. It brings with it the ability to monitor onboard conditions and also to control onboard devices at anytime. All this functionality comes via the Internet. This innovation is what we call Over the Air, On the Net. Now, with the help of powerful computers available today, your assets can never be too far to track, have its payload monitored and onboard devices controlled from your desk.

With the roaming features of the GSM Infrastructure, information continues to come back even when international boundaries are crossed. The Global Positioning System is also a global infrastructure. Building on these well-established global infrastructures, also means that you can indeed have your assets at your fingertips, regardless of where your assets are in the world.



Starfish eMat receives information from the 20 GPS satellites circling the earth. This information is used by Starfish to compute the current location. Starfish then transmits the GPS information, together with telemetry information via the Internet to the Starfish Servers.

The Control Center will then have access to this information.

Similarly, the control center can send information to Starfish to control onboard devices.

The Starfish Servers are a network of servers that will span the globe. Clients can opt to have a local server to handle their starfishes. By so doing, the local server will be inducted into the group of Starfish Servers and will work together with the other servers in the world.

Similarly, the control center can be anywhere in the world. If the local server is in the same location with the control center, access can be via the Intranet, over the Local Area Network rather than the Internet. This would mean faster response.

The control center software is built to fit the client's operations. The software will do all the necessary processing based on information it will receive from the Starfishes in the field.

Starfish uses its telemetry function to monitor onboard equipment as well as conditions of its payload. Starfishes telemetry function will monitor varying quantities, like temperature within refrigerated containers and petrol in the truck's tanks. It will also monitor doors and switches, for example panic buttons. It can also control devices like drop bolts, immobilize the vehicle and turn on sirens. It is ultimately what you would want to monitor or control onboard that determines what starfish will do for you.



Starfish can also transport any sort of information to and from the control center. An ambulance can use Starfish to transport back the vital statistics of the patient to the Trauma Center. This is done by directly interfacing Starfish to the equipment onboard the ambulance. The doctors in the Trauma Center can advise the paramedics onboard on how to administer the first aid before the patient arrives, constantly tracking the progress of both the ambulance and the patient.

Computers at the Monitoring Center will process the information from Starfish and will alert the operators if an abnormal situation has occurred. For example, Virtual Fencing keeps an asset like an excavator within the job site. An abnormal condition occurs when it crosses the virtual fence. A prime mover is associated with a particular container trailer. When the two goes in two different directions an abnormal condition occurs. When the temperature in a refrigerated container rises above 18 degrees Centigrade, an abnormal condition occurs.

The possibilities with Starfish are immense.

1	Processor	MSP430F147, 8MHz Low power RISC
2	GPS	NAVSYNC CW25, Ireland
		-173dbW Acquisition, -185dbW tracking
		Processor, ARM 966E-S, 120MHz
3.	GSM	SINCOM SIM300, Hong Kong
		Tri-band 900MHz, 1800MHz, 1900MHz
		GPRS Mobile Station Class B
		GPRS Multi-slot Class 10, 85.6 Kbps

All enquiries and appointments, please write to: sales@my-starfish.com

For more information, visit our web at: www.my-starfish.com

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