

# North Carolina Department of Health and Human Services Division of Health Service Regulation

Pat McCrory Governor Aldona Z. Wos, M.D. Ambassador (Ret.) Secretary DHHS

> Drexdal Pratt Division Director

March 26, 2013

William C. Behrens, COO 225 Baldwin Avenue Charlotte, NC 28204

Exempt from Review - Replacement Equipment

Facility:

Carolina Neurosurgery & Spine Associates

Project Description:

Replacement of mobile MRI equipment

County:

Charlotte

FID #:

021204

Dear Mr. Behrens:

In response to your letter of March 22, 2013, the above referenced proposal is exempt from certificate of need review in accordance with N.C.G.S 131E-184(a)(7). Therefore, you may proceed to acquire, without a certificate of need, a Signa HDxt GE 1.5T mobile MRI scanner to replace the existing GE 9.1X Hi Speed 1.5T mobile MRI scanner, serial number R3103. This determination is based on your representations that the existing unit will be removed from North Carolina and will not be used again in the State without first obtaining a certificate of need. Further please be advised that as soon as the replacement equipment is acquired, you must provide the CON Section and the Medical Facilities Planning Section with the serial number of the new equipment to update the inventory, if not already provided.

Moreover, you need to contact the Construction Section and the Medical Facilities Branch to determine if they have any requirements for development of the proposed project.

It should be noted that this Agency's position is based solely on the facts represented by you and that any change in facts as represented would require further consideration by this Agency and a separate determination. If you have any questions concerning this matter, please feel free to contact this office.

Sincerely,

Fatimah Wilson Project Analyst Craig R. Smith, Chief Certificate of Need Section

cc:

Construction Section, DHSR

Medical Facilities Planning Branch, DHSR

**Certificate of Need Section** 

www.ncdhhs.gov Telephone: 919-855-3873 • Fax: 919-733-8139

Location: Edgerton Building • 809 Ruggles Drive • Raleigh, NC 27603 Mailing Address: 2704 Mail Service Center •Raleigh, NC 27699-2704 An Equal Opportunity/ Affirmative Action Employer 23

Neurosurgeons
Jerry M. Petty, MD
C. Scott McLanahan, MD
Craig A. VanDerVeer, MD
Frederick E. Finger III, MD
Michael D. Heafner Sr., MD
Tim E. Adamson, MD
E. Hunter Dyer, MD
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Mark P. Redding, MD
Martin M. Henegar, MD
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Michael A. Cowan, MD
Joe D. Bernard Jr., MD



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Samuel J. Chewning, MD, MBA
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Kevin S. Cahill, MD, PhD, MPH
Scott D. Wait, MD

Physiatrists

David R. Wiercisiewski, MD John A. Welshofer, MD Andrew I. Sumich, MD John M. Lesher, MD Sameer Vemuri, MD Peter W. Bailey, MD

Mary S. Cloninger, CMPE

March 19, 2013

Craig Smith, Chief Certificate of Need Section Division of Health Services Regulations NC Department of Health and Human Services 2704 Mail Service Center Raleigh, NC 27699-2704

RE: Carolina Neurosurgery & Spine Associates Exemption Letter: Replacement of MRI Equipment – FID#021204

Dear Mr. Smith,

Carolina Neurosurgery & Spines Associates is providing written notice of an "exemption from review" to replace our existing Mobile MRI equipment. This MRI has been in operation since late 2003. The computers and software have been updated but the main components, like the magnet, are still original. The current unit is not eligible for further upgrades and must be switched to meet our technological needs.

Based on research, it is understood with this prior written notice our replacement is exempt from certificate of need review, per N.C.G.S. Section 131E-184(a)(7). The capital expenditure for the replacement, as noted on the attached quote from GE, is \$1,217,209.20. Our current MRI will be sold and the agreement is attached for your review. We will also be adding an addition \$13,125 to place a marketing wrap on the trailer

- 1. Comparison of existing and replacement equipment
  See attachment 1
- 2. Cost of Replacement Equipment Quote from GE for new MRI Scanner See attachment 2
- **3. Financing**Carolina Neurosurgery & Spine Associates owns the current MRI and plans to purchase the new equipment in cash.

4. Comparable Equipment and Use

The replacement equipment is functionally similar to existing equipment and will be used for almost the same diagnostic purposes. The replacement equipment will allow Carolina Neurosurgery & Spine Associates to additionally scan orbits, knee, and foot. See attachment 3 for replacement equipment brochure. See attachment 4 for the marketing that will wrap the new trailer.

5. Removal of existing equipment

The MRI being replaced is under contract to be sold to American Radiology Resource, LLC for the amount of \$190,000. See attachment 5.

I hope I have provided you all the information you need to confirm the replacement of the MRI as "Exempt from review". However, if you should need additional information please contact me at (704) 831-3056 or by email at <a href="mailto:behrens@cnsa.com">bill.behrens@cnsa.com</a> if you prefer.

Sincerely,

William C. Behrens, COO

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Carolina Neurosurgery & Spine Associates

# **Equipment Comparison**

Type of Procedures New Equipment is Capable of Performing	Type of Procedures Currently Performed on Existing Equipment	Percent of change in Per Procedure Operating Expenses (by procedure)	Percent of change in Patient Charge (By procedures)	Number Days in Use/to be used in NC per year	Locations when operated	Net Purchase Price of Equipment	Total Market Value of Equipment	Total Cost of Equipment	Total Capital Cost of Project (including trailer, marketing, etc.)	Specify if equipment was/is new or used When Acquired	Does Provider hold title to equipment or have a capital lease?	Date of Acquisition of each component	Mobile Tractor Serial Number/VIN#	Mobile Trailer Serial number/VIN#	Mobile or Fixed?	Providers method of Identifying Equipment	Serial Number	Model Number	Tesla Rating of MRIs	Manufacturer of Equipment	Type of Equipment	
n/a	Brain, IAC, Neck, Pelvis, Shoulder, Cervical Spine, Lumbar Spine, Thoracic Spine, Orbits	No Change	No change	365	<ul> <li>225 Baldwin Ave, Charlotte, NC 28204</li> <li>14135 Ballantyne Corporate Pl. Ste 100 Charlotte, NC 28277</li> <li>110 Lake Concord Rd. Concord, NC 28025</li> </ul>	\$2,134,559	n/a	\$2,134,559	\$2,134,559	New	Hold Title	December 2003	n/a	1S9FA482731182662	Mobile	Model name and/or number	R3103	GE 9.1X Hi Speed	1.5T	GE Healthcare	MRI Scanner	Existing Equipment
Brain, IAC, Neck, Pelvis, Shoulder, Cervical Spine, Lumbar Spine, Thoracic Spine, Orbits, Knee, Foot	n/a	No Change	No change	365	<ul> <li>225 Baldwin Ave, Charlotte, NC 28204</li> <li>14135 Ballantyne Corporate Pl. Ste 100 Charlotte, NC 28277</li> <li>110 Lake Concord Rd. Concord, NC 28025</li> </ul>	\$1,002,209.20	\$1,002,209.20	\$1,002,209.20	\$1,230,334.20	New	Hold Title	In process of purchasing	n/a	TBD	Mobile	Model name and/or number	TBD	SignaHDxt 1.5T 23.0	1.51	GE Healthcare	MRI Scanner	Replacement Equipment

# GE Healthcare

# Attachment 2 QUOTATION

Quotation Number: P6-C155628 V 16

Carolina Neurosurgery & Spine Associates P A Attn: Bryan Harmon 225 Baldwin Ave 225 Baldwin Ave

Charlotte NC 28204-3109

225 Balawin Ave

Charlotte NC 28204

Date: 03-14-2013

This Agreement (as defined below) is by and between the Customer and the GE Healthcare business ("GE Healthcare"), each as identified herein. GE Healthcare agrees to provide and Customer agrees to pay for the Products listed in this GE Healthcare Quotation ("Quotation"), "Agreement" is defined as this Quotation and the terms and conditions set forth in either (1) the Governing Agreement identified below or (11) if no Governing Agreement is identified, the following documents:

1) This Quotation that identifies the Product offerings purchased or licensed by Customer:

2) The following documents, as applicable, if attached to this Quotation: (i) GE Healthcare Warrantylies); (ii) GE Healthcare Additional Terms and Conditions; (iii) GE Healthcare Product Terms and Conditions; and (iv) GE Healthcare General Terms and Conditions.

In the event of conflict among the foregoing items, the order of precedence is as listed above.

This Quotation is subject to withdrawal by GE Healthcare at any time before acceptance. Customer accepts by signing and returning this Quotation or by otherwise providing evidence of acceptance satisfactory to GE Healthcare. Upon acceptance, this Quotation and the related terms and conditions listed above (or the Governing Agreement, if any) shall constitute the complete and final agreement of the parties relating to the Products identified in this Quotation. The parties agree that they have not relied on any oral or written terms, conditions, representations or warranties outside those expressly stated or incorporated by reference in this Agreement in making their decisions to enter into this Agreement. No agreement or understanding, and or written, in any way purporting to modify this Agreement, whether contained in Customer's purchase are release forms, or elsewhere, shall be binding unless hereafter agreed to in writing by authorized representatives of both parties. Each party objects to any terms inconsistent with this Agreement proposed by either party unless agreed to in writing and signed by authorized representatives of both parties, and neither the subsequent lack of objection to any such terms, nor the delivery of the Products, shall constitute an agreement by either party to any such terms.

By signing below, each party certifies that it has not made any handwritten modifications. Manual changes or mark-ups on this Agreement (except signatures in the signature blocks and an indication in the form of payment section below) will be void.

· Terms of Delivery:

**FOB Destination** 

• Quotation Expiration Date:

05-01-2013

• Billing Terms:

80% delivery / 20% Installation

Payment Terms:

**UPON RECEIPT** 

Governing Agreement:

None

Date

Each party has caused this agreement to be signed by an authorized representative on the date set forth below. Please submit purchase orders to GE Healthcare

3200 N. Grandview Blvd., Mail Code WT-897, Waukesha, WI 53188

GE HEALTHCARE
---------------

Scott Ramsey Product Sales Specialist 1004 Prairie Smoke Street Wake Forest, NC 27587

Phone: 919-435-2316

Fax: 919-869-1618 Floyd.Ramsey@med.ge.com

**CUSTOMER** 

Authorized Customer Date

WILLIAM C BEXIZENS COO

Print Name and Title

DO #

Desired Equipment First Use Date

GE Healthcare will use reasonable efforts to meet Customer's desired equipment first use date. The actual delivery date will be mutually agreed upon by the parties.

INDICATE FORM OF PAYMENT:

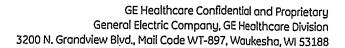
(If there is potential to finance with a lease transaction, GE HFS or otherwise, select lease.)

Cash \* \_\_\_\_Lease \_\_\_\_ HFS Loan

If financing please provide name of finance company below\*:

\*Selecting Cash or not identifying GE HFS as the finance company declines option for GE HFS financing.







Item No.	Qty	Catalog No.	Description
	1		Signa HDxt 1.5T 23.0
1	1	S7506KF	Signa HDxt 1.5T EchoSpeed 16-Channel Mobile MR system
			The Signa HDxt 1.5T EchoSpeed 16 Channel system is a high-performance, whole-body MR system that includes:  CXK4 compact, actively-shielded magnet  Liberty detachable patient table system  Actively-shielded, high-fidelity EchoSpeed gradients
			8-channel Hi-Definition data pipeline and XVre volume recon engine
			<ul> <li>HDxt workstation and user interface</li> <li>HDxt ScanTools and HDxt ContinuumPak</li> <li>Advanced Applications suites</li> </ul>
			CXK4 Magnet: The uniquely engineered Signa CXK4 magnet, manufactured in Florence, SC, is built for years of service and upgradeability, protecting you from obsolescence. High performance homogeneity and stability are a result of the 18-coil superconducting shim that allows you to shim for the environment, the patient and the exam with ease and flexibility. "Zero boil-off" technology reduces the need for service, and lowers operating costs.
		· .	Liberty Table System: The unique Liberty table system features a fully detachable patient table with automated vertical and longitudinal power drives for easy patient positioning and maximum patient safety. The table can be easily docked and undocked by a single operator. As a result, emergency patient extraction can typically be performed in less than 30 seconds eliminating the need for 1.5T compatible emergency equipment. The table includes a self-storing, non-ferrous IV pole, table pad and positioning pads, safety rails and security straps.
			EchoSpeed Gradient Platform: The EchoSpeed gradient platform provides 33 mT/m amplitude and 120 mT/m/ms slew rate performance on each axis with high-fidelity drivers to deliver the accuracy, reproducibility and power needed to ensure top quality results across all applications. The gradients are non resonant and shielded to minimize eddy currents and improve image quality. The gradient and body coil are integrated into a single, water-cooled unit to maximize performance, and this configuration includes a quadrature transmit/receive RF head coil.
		u datur tarih eren	Hi-Definition Data Pipeline and XVRE Reconstruction: The Hi-Definition data pipeline employs 16 independent data channels linked to 16 analog-to-digital converters and a dual-density single blade Volume Reconstruction Engine. Designed to address the challenge of data intensive applications, the XVRE reconstruction engine provides 2700 2D FFTs per second with full FOV, 256x256 matrix.



Item No. Qty Catalog No.

Description

HDxt Workstation and User Interface The HDxt workstation uses dual AMD Opteron 250 (2.4 GHz) processors with the Linux operating system. The workstation includes a wide-screen, high-definition LCD monitor with 1920x1200 dot resolution and 500:1 contrast ratio. The computer components are housed in a single tower configuration, and the scan control keyboard is ergonomically designed with an intercom speaker, microphone, volume controls and emergency stop switch. This configuration also includes a modem or broadband connection that links the system to GEHC InSite Service Engineers enabling remote diagnostics and optimum system performance.

The HDxt User Interface enhances productivity through single-screen prescription for most protocols and includes Secure Coil Connect, that eliminates coil connection errors, ProtoCopy, that facilitates the development and rapid transfer of scan protocols, and Vector Gating for highly reliable ECG triggering.

HDxt ScanTools, ContinuumPak and Applications Suites:

The HDxt delivers a complete portfolio of clinical applications optimized for whole-body MR imaging - basic to advanced.

HDxt ScanTools provide the core pulse sequences and analysis tools to enable a broad range of clinical imaging capability.

2D Spin Echo and 2D/3D Fast Spin Echo are versatile imaging sequences that use RF-refocusing. FSE sequences speed scanning and optimize imaging in 2D and 3D modes with increased slice coverage and minimal edge blurring. Inversion recovery techniques enable rapid fluid suppressed T1 FLAIR and T2 FLAIR imaging with enhanced gray and white matter contrast.

2D/3D Gradient Echo and 2D/3D Fast Gradient Echo use short TR/TE, variable flip angles and gradient refocusing to reduce scan time in 2D and 3D imaging modes. GRE sequences encompass multiple techniques to enable the optimization of contrast, fluid sensitive imaging, fat/water in-phase and out-of-phase imaging, and fat suppression.

Time-of-Flight is family of GRE/SPGR sequences optimized to exploit flow related enhancement in 2D, 3D and gated imaging modes.

Phase Contrast is a family of GRE sequences optimized to exploit flow related enhancement in 2D, 3D and Cine imaging modes. PC also uses velocity encoding pulses to capture signal from flowing blood or CSF for velocity and directional flow information.

Echo Planar enables ultra-fast imaging using SE or GRE sequences. EPI sequences Encompass multiple techniques that enable optimized imaging in 2D and 3D modes as well as single-shot and multi-shot modes and Inversion recovery techniques.



Item	No	Qty	Catalog No.
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## Description

FuncTool enables advanced processing for a broad range of MR applications. The suite of algorithms includes ADC and eADC mapping for diffusion imaging and correlation coefficients for functional brain imaging. For contrast enhanced imaging, the suite provides negative and positive enhancement integrals, signal enhancement ratio, maximum slope increase, maximum difference function and difference function.

Multi-planar Volume Reformat enables the manipulation of 3D volumetric MR data sets. The reformat tool generates alternative viewing planes and volume thickness allowing the user to scan one but get multiple views.

Interactive Vascular Imaging enables the removal of the background from MRA images. The IVI tool is embedded in MPVR and enables the generation of maximum or minimum intensity projections in multiple viewing planes to enhance MRA imaging.

ClariView uses state-of-the-art adaptive filter Algorithms to reduce noise and sharpen edges. The filter tool enables different levels of noise reduction and edge sharpening to enhance image display.

The HDxt ContinuumPak provides new features and platform enhancements that affect workflow, ASSET reconstruction and applications capability.

## Workflow and ASSET Enhancements

- Auto-Voice allows the user to adjust playback speed to accurately match scan intervals.
- Auto-Transfer allows the user to specify select series for transfer and eliminate the transfer of non-essential series.
- HIS/RIS automatically updates patient information with Access or Patient ID.
- Graphic Prescription enables copy shim volumes, save localizer images, and reverse slice prescription with a single click.
- Auto-Contrast Inherit copies the contrast designation to all subsequence series in a prescription.
- ASSET has been optimized to reduce reconstruction time for applications that use ASSET parallel imaging acceleration.

3D Dual Echo enables high-resolution, volumetric in-phase and out-of-phase liver imaging in a single breath hold. The 3D volumetric data set can be reformatted into multiple planes and the single breath hold ensure perfect slice registration across the two contrasts.

BrainSTAT post-processing automatically Generates parametric maps for Neuro Blood Flow, Blood Volume, Mean Transit Time, and Time to Peak signal intensity. A Gamma Variant fitting algorithm is used to automatically estimate the arterial input function and then calculate the values for the four parametric maps. The maps may be saved



Item	No.	Otu	Cataloa	No.

## Description

in DICOM format and fused with high-resolution anatomic datasets for improved visualization of tissue and anatomy.

EchoPlus enables diffusion-weighted imaging. EchoPlus uses motion sensing gradient pulses in three directions to generate isotropic diffusion-weighted images in conjunction with T2 FLAIR images. B value selection ranges from 0 to 7000 s/mm2 providing the flexibility to balance diffusion sensitivity and background suppression. EchoPlus is compatible with ASSET and images are processed in FuncTool.

3D BRAVO is a 3D GRE sequence that uses an IR-prep pulse and parallel acceleration to deliver T1W-isotropic, whole-brain coverage.

3D FIESTA and 3D FIESTA-C are 3D sequences with high fluid sensitivity that enable high resolution of small intracranial structures and joints.

ASSET is an acceleration technique that uses the geometry of multi-element coils to speed image data collection. As a result, the user may choose to reduce scan time, increase in-plane resolution, or increase slice coverage. ASSET benefits Neuro imaging by enhancing spatial resolution, reducing scan time and reducing susceptibility artifact on diffusion imaging.

HDxt Advanced Body & MSK Suite applications are designed to deliver accelerated imaging, enhanced high resolution imaging, and/or enhanced image contrast properties. Overall this suite provides a broad range of tools that enable snapshot, breath-held, respiratory gated and respiratory compensated body and organ system imaging.

3D LAVA is designed for multi-phase whole-liver imaging and combines 3D SPGR and ASSET (up to 3X) to deliver reduced scan time and extended coverage without compromising in-plane resolution. LAVA also uses an optimized inversion pulse and a view ordering technique that yields enhanced image contrast and robust, uniform fat suppression.

3D LAVA-XV with ARC combines LAVA with ARC acceleration to extend coverage and/or the resolution performance of LAVA multi-phase imaging. ARC uses a data-driven acceleration technique to enhance image quality.

DynaPlan enables the easy set-up and optimization of multi-phase organ exams, and includes the ability to link Auto-Voice instructions with the protocol.

3D eMRCP is an FSE technique optimized for rapid T2W imaging of the biliary tree. 3D eMRCP uses an optimized echo train, partial filling and optional burst mode to enable rapid high-resolution in either breath-hold or gated modes.

2D FatSat FIESTA combines 2D steady state imaging with fat saturation for fluid-sensitive, fat-suppressed body imaging with ultra-short acquisition times.



Item No. Qty Catalog No.

Description

MERGE is designed to image the C spine. MERGE acquires and sums multiple gradient-echoes at various echo-times to deliver optimized gray white matter contrast within the cervical cord.

3D COSMIC is designed to image the C spine. COSMIC uses a unique "pre" steady-state imaging technique to deliver optimized visualization of soft tissue structures adjacent to bony structures such as the nerve roots or intervertebral discs.

ASSET is an acceleration technique that uses the geometry of multi-element coils to speed image data collection. As a result, the user may choose to reduce scan time, increase in-plane resolution, or increase slice coverage. ASSET benefits body imaging by enhancing spatial resolution and reducing scan times.

HDxt Vascular and Cardiac Suite applications are designed to deliver accelerated imaging, enhanced high-resolution imaging, and/or enhanced image contrast properties. Overall this suite provides a broad range of MRA timing tools and enables cardiac and coronary morphology and functional assessment.

FTMRA (Fluoro-Trigger MRA) enables real-time monitoring and manual triggering for vascular time-course imaging. FTMRA allows the user to view real time images of the area of interest and then manually trigger data acquisition at the optimum time. The switch over takes less than one second.

SmartPrep and SmartStep enable automated bolus detection and automated bolus chasing for time-course vascular imaging. SmartPrep uses a special tracking pulse to monitor MR signal intensity changes. Data acquisition is automatically triggered when the threshold signal intensity is reached. SmartStep adds automated table stepping for multi-station exams that integrates scout series, graphic prescription, prescan, bolus detection, table motion and coil switching. The SmartPrep suite is compatible with elliptic-centric encoding and ZIP reconstruction for optimum image quality.

2D FIESTA is a steady-state technique that yields high contrast between the blood and myocardium even in the presence of turbulent flow. 2D FIESTA is designed for multi-slice, multi-phase functional cardiac imaging.

Double-Triple IR-FSE combines inversion recovery suppression and chemical fat saturation for black-blood and morphological cardiac imaging. The IR pulse is optimized to suppress blood flow artifact and can be used alone or in conjunction with chemical fat saturation to eliminate competing signal from fatty tissues surrounding the heart and coronary arteries.

3D FatSat FIESTA combines volumetric acquisition and fat saturation for high resolution, high-contrast coronary artery imaging with ultra-short breath-hold times.

iDrivePro and iDrivePro Plus provide real-time interactive MR imaging that makes it



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## Description

easier to optimize and streamline scan prescription. The iDrive tool uses the 2D FGRE/FSPGR sequence and allows the user to change on-the-fly geometric and image contrast scan parameters. Results can be evaluated immediately and bookmarked or saved. Scan locations can also be easily exported to pre-programmed protocols. iDrivePro Plus enables accelerated frame rates needed for cardiac imaging.

ASSET is an acceleration technique that uses the geometry of multi-element coils to speed image data collection. As a result, the user may choose to reduce scan time, increase in-plane resolution, or increase slice coverage. ASSET benefits body imaging by enhancing spatial resolution and reducing scan times.

The HDxt ConnectPro Package is designed to significantly improve productivity, reduce manual transcript errors, and synchronize scan options. ConnectPro enables the 3.0 DICOM

worklist server class for the MR system that makes it possible to query a DICOM compatible HIS/RIS by name, modality, or schedule date and download patient demographics directly to scanner. The ConnectPro package also includes Performed Procedure Step that automatically notifies the HIS/RIS and PACS systems of procedure status. Separate gateway hardware may be required to connect non-DICOM compatible HIS/RIS systems.

This configuration of Signa HDxt 1.5T is designed for installation into a Mobile van and includes a complete mobile hardware kit, magnet compressor and mobile gradient chiller. The mobile van for system installation is the responsibility of the Customer.

## 2 1 M3335CN

Signa 1.5T EchoSpeed Mobile 16-Channel Magnet and Gradient Module

With its uniquely contoured system enclosures, the compact 1.5T Signa superconducting magnet offers superb homogeneity; and it includes 18 GE-designed superconducting shim coils to further improve homogeneity, particularly for fat saturation with large or off-center fields of view. The magnet's active shielding minimizes the stray ambient magnetic field to increase safety and minimize interference with equipment operation.

The combination of a wide, 60-cm-diameter bore and a patient table assembly that rests close to bore bottom creates ample room even for large patients. Innovative K4 cooling technology prevents helium boil-off while making refills an extremely rare occurrence.

The Gradient Module installed within the magnet bore consists of three gradient coils and the quadrature transmit/receive body RF coil. Each gradient coil is designed to change magnetic-field strength linearly with increasing distance from the center of the magnet by as much as 33 mT/m.



Item No.	Qty	Catalog No.	Description
3	1	M1060JW	Magnet Shield Cooler Compressor - Water Cooled
			Compressor designed for CXK4 magnet subsystems for 0.7T or 1.5T and compatible with fixed, relocatable and mobile magnet configurations. Compressor is water cooled and all water cooling systems must be a closed loop design to eliminate the possibility of magnetic contaminants entering into the system.
4	1	M3340DA	Language Collector in English
			This collector contains a keyboard kit and a warning sign kit in English.
5	ī	M3340AC	IDEAL
			IDEAL provides consistent, robust fat and water separation every time, also in difficult to scan anatomies and presence of high magnetic susceptibility effect. Four different contrasts: water-only, fat-only, in-phase, out-of-phase, are generated from a single acquisition, to help facilitate more confident diagnoses and reduce repeat exams. IDEAL acquires multiple echoes at different TE times to generate phase shifts between water and fat, allowing for more accurate pixel-by-pixel water and fat separation, while retaining maximum SNR. IDEAL can be utilized with FSE-based contrasts such as T1, T2, PD.
6	1	M7000JA	PROPELLER 3.0
			PROPELLER 3.0 uses an innovative k space filling technique and post processing algorithms to help reduce and correct for motion and minimize magnetic susceptibility artifacts. Radial k space filling pattern causes oversampling of the k space center, generating more SNR and providing excellent tissue contrast. Radial k space filling is inherently less sensitive to motion compared to the Cartesian method. In addition, a sophisticated motion correction post-processing algorithm is deployed to reduce effects of motion originating from CSF flow, breathing, patient tremor or voluntary movements. PROPELLER 3.0 has been enabled for all anatomies, and T1 FLAIR, T2, T2 FLAIR, DWI as well as PD contrasts in all planes.
7	1	M7000EZ	Flow Analysis 4.0
			Flow Analysis automates the review and analysis of gated phase contrast magnetic resonance (MR) images and generates a report for the referring physician. This version is available on the host computer
			Flow Analysis has an automated edge detection algorithm that propagates through all the phases of the cine phase contrast series.
			The flow analysis measurement tab displays a summary chart of peak velocities in addition to individual velocity results from each phase of the cardiac cycle. A



Item No.	Qty	Catalog No.	Description
			background correction may also be applied which is particularly suited to slow flowing fluid such as cerebrospinal fluid.
			Customizable Macros are a feature of Flow Analysis 4.0. These Marcos allow the user to quickly write a report specific to the patient being assessed with simple mouse clicks. The macros are customizable to reflect the language used by the reporting physician.
			Flow Analysis offers the capability to archive reports or cine images as seen in a DICOM format so they maybe viewed on any DICOM viewer.
8	1	M3335LG	1.5T 16-Channel Head/Neck/Spine Array-GE Coils
			The 1.5T Head/Neck/Spine (HNS) Array delivers convenience without compromise. Compatible with new 16-Channel HDx MR systems, this 29-element coil serves as a high-resolution brain coil, high-density neuro-vascular array, and a multi-element spine coil in one convenient package. Designed to accommodate multi-dimensional parallel imaging in any scan plane, this coil yields unprecedented imaging speed and superior image quality, thanks in large part to a unique element arrangement that focuses the signal over the anatomy of interest.
9	1	M3335MC	1.5T 8-Channel Body Array - GE Coils
		· .	The 8-Channel Body Array is designed for high definition MR imaging of the chest, abdomen and pelvis. This 12-element, quadrature phased-array coil provides extensive coverage, enabling multi-station anatomical and vascular imaging of the chest-abdomen or abdomen-pelvis without repositioning the coil. The array is optimized for use with ASSET acceleration for enhanced breath-hold imaging procedures.
10	1	M3335MN	1.5T 3-Channel Shoulder Array - GE Coils
			The 1.5T 3-channel Shoulder Array offers the increased signal-to-noise characteristic of phased-array technology, along with a unique sleeve design that delivers exceptional joint-imaging capabilities. The coil provides clear definition of the shoulde joint, specifically the head of the humerus, clavicle, acromion, supraspinatus muscle and ligaments. Patient comfort pads and restraining straps are included.
11	1	M3335ME	1.5T Quad Extremity Coil - Invivo
	<sub>e</sub> rī wīv	ta sanga s	The transmit/receive design of the Quad Extremity Coil helps ensure optimal results in studies of the knee, ankle and foot. Its unique anterior extension increases the imaging volume for thorough evaluations in dorsi-flexed foot and ankle studies, covering FOVs up to 30 cm for the foot and ankle, and up to 20 cm for the knee.



Item No.	Qty	Catalog No.	Description
12	1	E9200AG	MR Premium Tempurpedic Positioning Pads, 1 chair, Narrow and Wide Straps
13	1	E8823M	Magnacoustics Genesis ULTRA Communication & Music System
			The Magnacoustics Genesis ULTRA is the only MRI Communication & Music System to interface directly with GE's MRI hardware and software. This allows software driven Auto Voice Commands from GE's computer to be delivered directly into the patient's ears for breath-hold sequences. This same interface allows the Technologist to talk directly to the patient through the console Mic even while the scan is in progress. The Genesis ULTRA also features an exclusive Patient Ready Signal. By simply depressing a small button on the handheld control an audible and visual signal is transmitted to the Technologist indicating the patient's readiness for the scan to begin. This simple step streamlines the breath-hold exam which amounts to approximately 30% of all exams. Patient Handheld Volume and Media Selection Controls with Voice Feedback interface with an FM/AM stereo, CD player, and iPod interface. This distracts even the most apprehensive of your patients by allowing them to be in control of their own environment. Additionally, the Auto Gain feature automatically raises and lowers the volume level for the patient based on the Sound Pressure Level of the MRI. Magnacoustics also provides the only patented 8-driver transducer that provides the highest sound directly to the patients ears with the MagnaLink Headset System. This patented system includes a stethoscope-style headset with the MagnaPlug (replaceable earplug) that provides 29dB of attenuation and complies with GE Healthcare MR Safety Guide Operator Manual.
			The Genesis ULTRA's See-In-the-Dark GUI Electroluminescent Backlit Technologist Control Unit enhances operation in the normally low-lit MRI environment allowing the Technologist to operate the entire system with the touch of a button.
			The Genesis ULTRA includes an integral interface for fMRI with built-in input for audio stimulation and output for responsesE
14	1	W0102MR	8 Day MR TiP Onsite Signa HDxt Family Training
			This program instructs MR technologists in the start-up and advanced operation of a Signa HDx MR system. This training is designed for a core group of 4 technologists dedicated to the entire program. Key Radiologists will assist protocol development, direct patient scanning and review images. The patient schedule should be modified to allow contact hours listed in the curriculum description.
			The 8 day program is delivered in 2 visits, four consecutive days each.Includes T&L expenses
		·	This training program must be scheduled and completed within 12 months after the date of product delivery.



Item No.	. Qty	Catalog No.	Description	
	1		NonProducts	
15	1		Frontline Communications Corporation Proposal # 99-228 mobile GE 1.5 MRI System \$215,000	2 Oshkosh 48ft Trailer for a
			Quote Summary:	
			Total Quote Net Selling Price	\$1,217,209.20
			(Quoted prices do not reflect state and local taxes if applic Includes Trade In allowance, if applicable.)	able. Total Net Selling Price

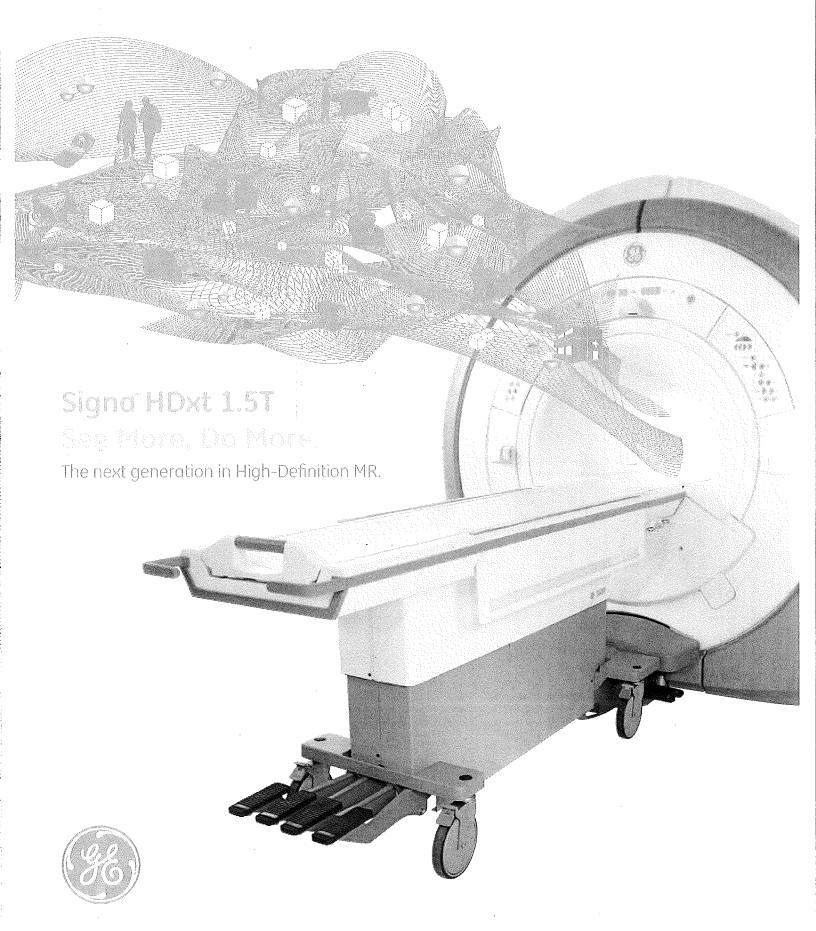


Options
(These items are not included in the total quotation amount)

Item No.	Qty	Catalog No.	Description		Ext Sell Price
16	1	E8804SN	Medrad Spectris Solaris EP MI	R Injection System for Mobiles	\$57,000.00
· —· · · · · · · · · · · · · · · · · ·			field strengths up to and and touch-screen for fewer keystr patient to be prepared before syringe for longer KVO or mul	R Injector is for use in all MR scanner including 3.0T. Optimized okes, KVO (keep vein open) allows beginning scan. Larger 115 ml saline tiple flushes. Includes cables and atted with mobile GE MR systemsE	
			l@uoted prices do not reflect Includes Trade In allowance,	state and local taxes if applicable. Total	al Net Selling Price



# Charles I and the control

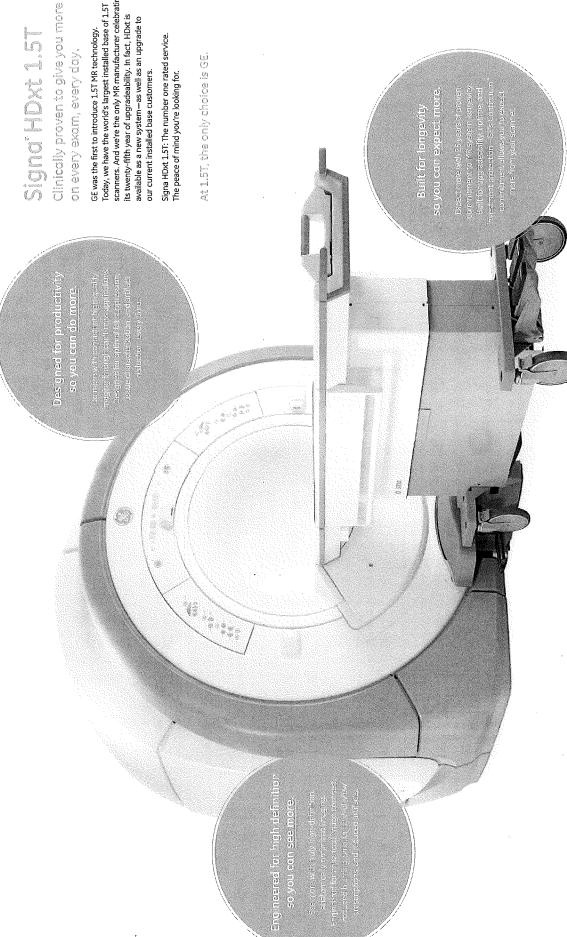




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You've been heard. When you want more out of your MRI scanner, GE listens. And when you demand more accuracy, more productivity, and more support, GE delivers. Bull on the high definition platform you know and trust. Signa\* Abtx offers an MR System that allows you to see more, do more, and expect more than ever before.

Introducing Signa HDxt 1.5T, the next generation in High-Definition MR.



GE was the first to introduce 1.5T MR technology.

Today, we have the world's largest installed base of 1.5T scanners. And we're the only MR manufacturer celebrating its twenty-fifth year of upgradeability. In fact, HDxt is available as a new system—as well as an upgrade to our current installed base customers.

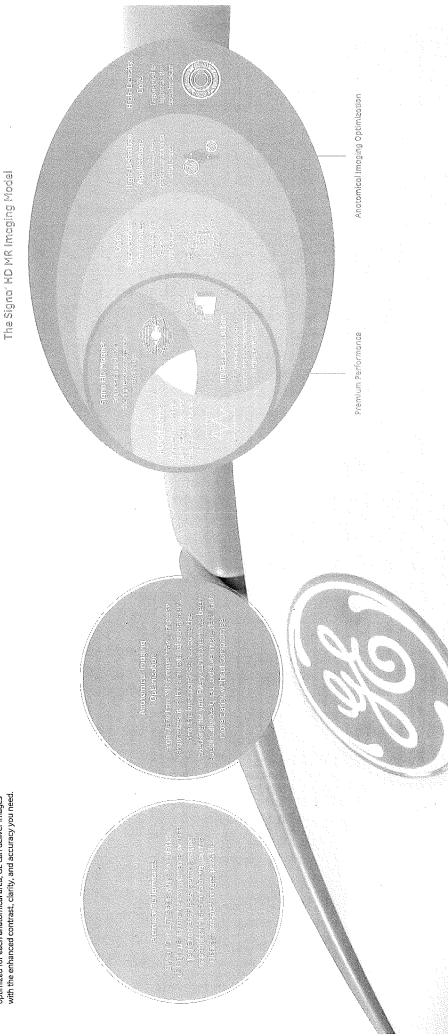
GE Healthcare Signa HDxt 1.5T 3

4 GE Healthcare Signa HDxt 1.5T

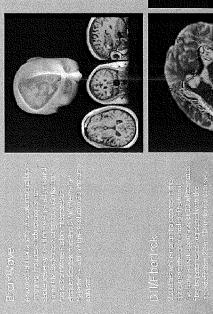
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# Engineered for high-definition, anatomically optimized imaging

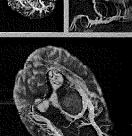
The Signa® HDxt 1.5T is engineered from end-to-end to allow you to see more. With GFs high-density coils, data acceleration technology, and high-definition applications optimized for each anatomical area, GE can deliver images with the enhanced contrast, clarity, and accuracy you need.



















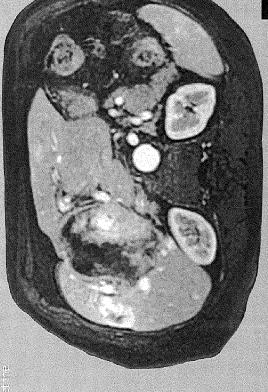






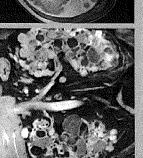


See more in Booky Innoging
Set the whole occure with GEs comprehensive IMR book imaging solutions—an array of advances rocks designed to meet the meets of you und your pottem.









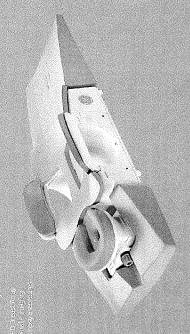


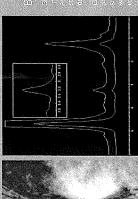


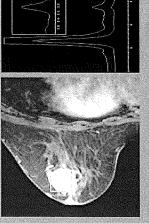




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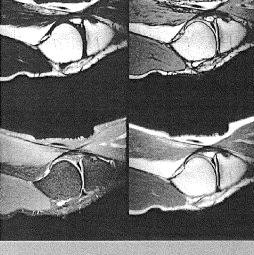


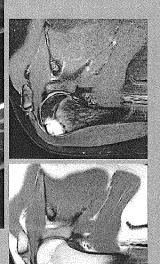


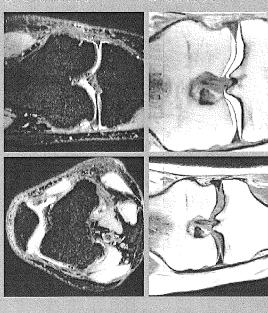


with a wean que that afters you to scan once and get multiple controls.—variet only, for only. The brase, and out-of-plass—and delivers with ally infallable to suppression. Signal HEXT I all makes no bares about additing musculoske etal androny like.





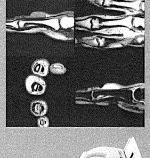














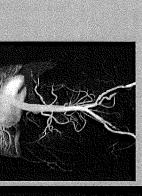
Advenced vascular techniques that provide righ-seth from seth from seth from the solity to deliver comprehensive cardiac studies. Signer HDx: LSI takes cardiac and vescular maging to heart.



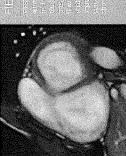


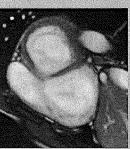








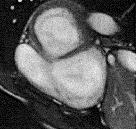




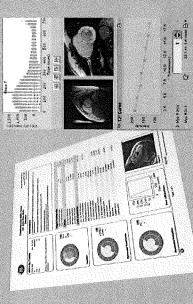


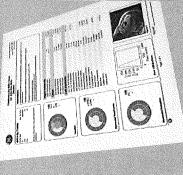














# designed for simplicity Signo\* User Interface

The Signa HDxt wide console monitor is a high resolution display that displays multiple windows which are simultaneously accessible.

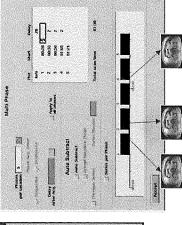


allow you to permanently load physician preferences and protocol information to ensure imaging consistency.

4. Gating and triggering screen is easily visualized, eliminating the need to change screens when evaluating waveforms. 3. Auto TR eliminates time spent finding the lowest TR depending on prescribed slices.

# DynaPlan





- Optimize your breast or abdomen delay times
- Subtraction, mask-phase and unique time delays are optimized for even the most unique protocols
- Preferences are permanently stored, simplifying future use

000 man 01:00

User Interface Console & Wizard Guides

THE RESERVE OF THE PARTY OF THE

Easy access to timing screen.

ProtoCopy

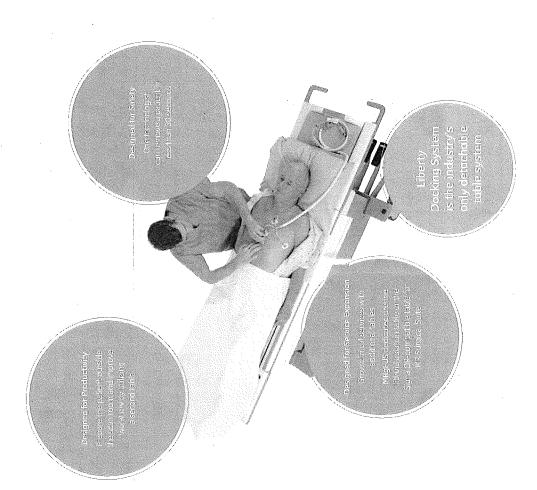
Copy a protocol after the scan has been completed

\*Source: 200 US Technologists Randomly Surveyed by IMV, Sponsored by GE Healthcare. October 2007

Share between multiple-facilities or centers with a mouse click

GE Healthcare Signo HDxt 1.5T 19

Liberty" Docking System: more than a table



# 

Built for upgradeability, uptime and investment protection—it's all about system longevity

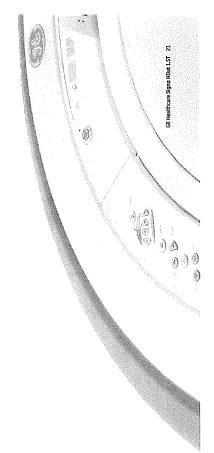
With ever increasing operational costs and the need to stay technologically current, you need a strategic vendor who continuously provides for you.

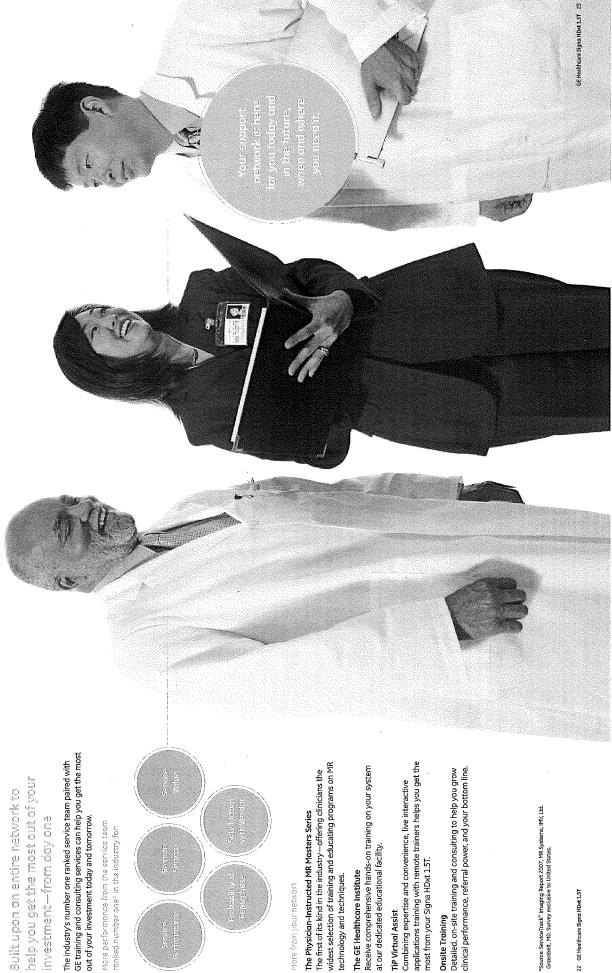
The GE MR mission: flexible systems with a future. The upgradeability benefits from GE are unmatched. It starts with a proven 25-year continuum that's driven by a magnet designed for longevity and seamless upgradeability. It continues with the easy-to-incorporate breakthrough applications and system enhancements that keep customers current in today's ever changing and increasingly competitive market. Rest assured, your investment is always protected. Wherever you are from wherever we are, your Signa® HDxt 1.5T is supported by the world's most advanced portfolio of MR service and asset management tools, so you reap all the benefits of GE MR ownership. Maximized uptime. Optimized accuracy and consistency. Higher productivity. Better patient care. And true peace of mind.

# Built for investment protection

GE introduced the industry's first short-bore 1.5T magnet. Manufactured in Florence, South Carolina, it's built for years of service and upgradeability—instead of replacement—to protect you from obsolescence.

A magnet built
to last.
The industry's
choice for reliability—
not replacement.





investment-from day one

out of your investment today and tomorrow. More performance from the service team ranked number one" in the industry for: \*Source: ServiceTrack" Imaging Report 2007, MR Systems, IMV, Ltd. Greenbelt, MD. Survey exclusive to United States.

at our dedicated educational facility. The GE Healthcare Institute technology and techniques.

TiP Virtual Assist

Onsite Training

More from your network

22 GE Healthcare Signo HDxt 1.5T

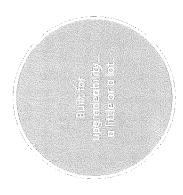
# suit for a Confibura

GE has a proven 1.5T Continuum of upgradeability that for 25 years has enabled customers to expand the capability of their system with new surface coils, new software applications, or even new system platforms without replacing the magnet.

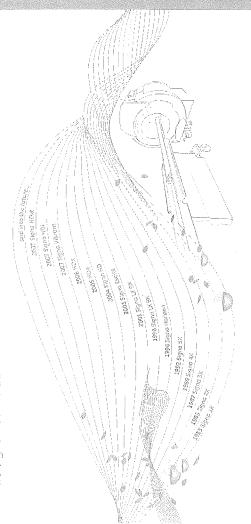
With platform upgradeability starting from any point, scalability is on your side.

Built for incorporation of the ContinuumPak, which are no-charge regular software releases with system improvements, and new software applications.

Easy-to-add breakthrough applications and new coil technology keep users technologically current in today's ever-changing and increasingly competitive market.



# The Signa® Continuum



 $@2008\ \mbox{GE}$  Medical Systems, doing business as GE Healthcare. All rights reserved.

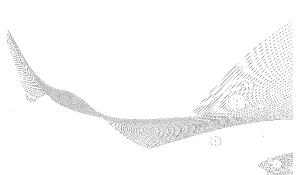
General Electric Company reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation.

France Paris Fax: +33 (0) 1 30 70 98 55

Japan Tokyo Fax: +81 3 3223 8524

Singapore Fax: +65 291 7006

USA Milwaukee Fax: +1 262 521 6123



# Healthcare Re-imagined

GE is dedicated to helping you transform healthcare delivery by driving critical breakthroughs in biology and technology. Our expertise in medical imaging and information technologies, medical diagnostics, patient monitoring systems, drug discovery and biopharmaceutical manufacturing technologies is enabling healthcare professionals around the world to discover new ways to predict, diagnose and treat disease earlier. We call this model of care "Early Health." The goal: to help clinicians detect disease earlier, access more information and intervene earlier with more targeted treatments, so they can help their patients live their lives to the fullest. Re-think, Re-discover, Re-invent, Re-imagine.

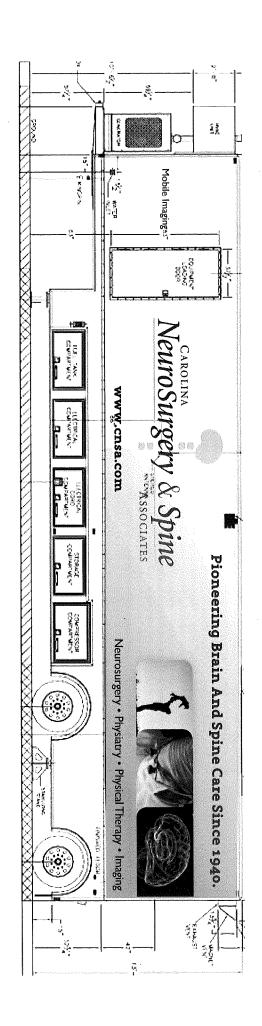
GE Healthcare 3000 North Grandview Waukesha, WI 53188 USA

Chalfont St. Giles, Buckinghamshire UK

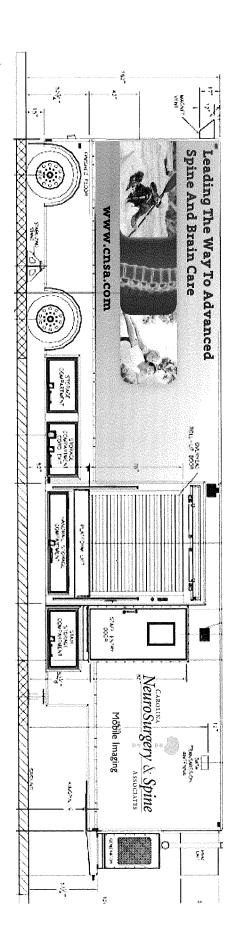
www.gehealthcare.com



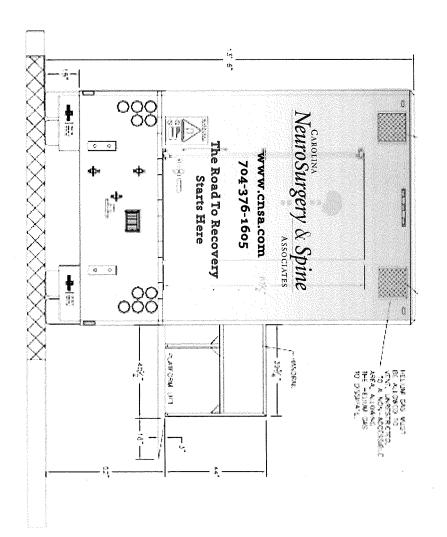




# Side 2



# Back



# American Radiology Resource, LLC 22 W Padonia Rd. Suite 325 B Timonium, MD 21093

March 11, 2013

William C. Behrens Chief Operating Officer Carolina Neurosurgery & Spine Associates 225 Baldwin Avenue Charlotte, N.C.28204

RE: Purchase of 2003 GE 1.5T LX HighSpeed Plus Mobile MRI

## Dear William:

The purpose of this letter is to confirm the terms of the sale of one 2003 GE 1.5T LX HighSpeed Plus Mobile MRI. If the terms are acceptable to you please sign and initial where indicated and e-mail a copy to me as soon as possible. If you have any questions, please contact me at 410-252-4919.

## AGREEMENT:

American Radiology Resource, LLC ("Buyer") agrees to purchase one 2003 GE 1.5T LX HighSpeed Plus Mobile MRI (Equipment") (See Exhibit A; Equipment Specifications for details) from Carolina Neurosurgery & Spine Associates ("Seller"), for \$190,000.00 on the closing date defined below.

- Buyer is purchasing Equipment in "As Is, Where Is" condition in sole reliance upon his/her knowledge and personal inspection of Equipment with the exception that the Seller agrees to maintain the equipment according to manufacturer's specifications until the closing date. Upon receipt of a good faith deposit of \$20,000.00 sent via bank wire, Buyer will have the right to inspect Equipment and will conclude such inspection no later than March 22, 2013. Buyer will, within two business days after inspection, notify Seller, in writing, of whether to purchase or reject the equipment. If Buyer accepts the equipment for purchase, the deposit becomes non-refundable. If the Buyer rejects the equipment, the deposit will be returned to the Buyer within two business days and this agreement is canceled.
- Closing is anticipated to occur on or before May 8, 2013. No later than April 30, 2013, Buyer will make full payment for Equipment of \$170,000.00 via wire transfer (per the instructions set forth below). Buyer will provide Seller with a valid sales tax resale certificate or agree to pay applicable sales taxes. Seller will have clear title available to Buyer on the closing date. If the Equipment is not available by the anticipated closing date, the buyer has the option to cancel this agreement and have the deposit refunded or renegotiate the purchase price.
- Buyer is responsible for the cost of removal from seller's site and agrees to remove the equipment from
  the Seller's site on the Closing date. In the event that the Buyer is unable to remove the equipment from
  the Sellers site on the closing date, Buyer agrees to pay all carrying costs and storage fees until the
  equipment is removed from the Sellers site. Seller has no liability for the equipment or its condition after
  the closing date. Seller is responsible for providing clear access for removal of the equipment by the
  Buyer and agrees to remove any barriers, obstacles, trees, in order to provide clear access.
- In the event Buyer is unable to make full payment within fourteen days from the closing date, Seller reserves the right to terminate this Agreement, and retain the deposit, or extend the closing date to a mutually agreeable date. During this extension period, Buyer agrees to pay any applicable costs for storage fees, electrical fees, system maintenance costs and cryogen costs if applicable.

- In the event of breach of any material term of this Agreement by Seller, Seller will, within 48 hours of receipt from Buyer notice of such breach, return to Buyer all funds received and Buyer will return Equipment to Seller, if applicable. In the event of breach of any material term of this Agreement by Buyer, Buyer will, within 48 hours of receipt from Seller of such notice, forfeit its deposit. Seller, in its sole discretion, may seek to re-negotiate with Buyer.
- The parties hereto agree that this Agreement constitutes the entire agreement between parties with respect to the subject hereof. The parties hereto agree there are no promises, agreements, conditions, undertakings, warranties, or representations, oral or written, expressed or implied, between them, other than as set forth herein.

Sincerely,	Accepted and agreed to:
American Radiology Resources, LLC	Carolina Neurosurgery & Spine Associates
"Buyer"	"Seller"
X David F. Pac, President	x
Date:	Print Name; Title
Date:	
Wiring Instructions:	
Bank:	
Account Name:	
ABA#	

ACCT#

# **Exhibit A; Equipment Description**

# 2003 GE 1.5T HighSpeed Plus Mobile MRI

- CX K4 LCC 1.5T
- 9.1 Software
- 33m/T/m, SR77 Gradients
- 8915 Gradient Type
- SRFD2 RF Amp
- BRM Resonance Module
- Software:
- EPI
- Fast Gradient ECHO
- CINE
- Fast Spin Echo Flair
- TOF
- Phased Contrast Vascular Imaging
- Spectroscopy/Probe
- DW EPI
- Flair EPI
- SPECIAL
- Smartprep
- SS-FSE
- Three plan
- Work
- E3DTOF
- FSE-XL
- Bloodsup
- Fast Cine
- Coils

**Torso Array** 

**QD** Head

**CTL Phased Array** 

**PA Shoulder Array** 

**NV** Array

•2003 AK Trailer

- SGD Perf
- I Drive
- I Drive Pro
- Smart Prep 2000 Upgrade
- Probe 2000 Upgrade
- Multi Nuclear Spectroscopy
- Functool 2
- Voxtool
- IVI
- Clairview
- Highspeed
- Ultrashort TR
- T2 breathhold
- Acgdplus
- MRCP 3
- Drnam R1
- SSFSE MRCP
- T1 BreathHold

Sales Agreement 03.04.13 Initials:

American Radiology Resources, LLC \_\_\_\_\_ Magnetic Diagnostic Resources of Central New York. \_\_\_\_\_