UNITED STATES MARINE CORPS
Headquarters and Maintenance Squadron 26
Marine Aircraft Group 26
2d Marine Aircraft Wing, FMF, Atlantic
Marine Corps Air Station, (Helicopter)
New River, Jacksonville, N. C. 28545-6071

IN REPLY REFER TO:
AFO
14 JUN 85

From: Headquarters and Maintenance Squadron 26 Airframes Division
To: MCAS(H) New River S-4

Subj: PROPOSED EQUIP LISTING FOR MAG-26/29 CORROSION CONTROL/NDI HANGAR

1. List of equip required for corrosion control hangar:

(1) Ambient Air Breathing Apparatus
(2) Honing Machine dry portable (4) 17.4 CU FT
(3) VACU-BLAST machine (1) 545 CU FT
(4) 250 gal. stripping vats (3) hot and cold water
(5) Work benches 2' x 6' (12)
(6) Office desk executive (1)

2. Additional requirements:

(1) Air compressor 4.5CFS, constant volume at any given outlet, 125PSI
(2) Two phones, 2 lines each, class "A", due to shared spaces
(3) Degreaser unit (2) 32.2 CU FT
(4) Lighting flourescent, spark proof, high intensity
(5) All paint and chemical areas doubled, 6 rooms due to shared spaces
(6) Adequate hazardous waste disposal area for a minimum of four different chemicals
(7) X-RAY exposure room 12' X 50' double doors, SEE ENCLOSURE (1)

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TABLE 1-1. ROOM AND EQUIPMENT SCHEDULE

FSN	NOMENCLATURE	EQUIP NUMBER	SIZE	AMP	VOLT	PHASE	CYCLE	AIR	WATER	DRAIN	EXHAUST
ROOM #1 - EXPOSURE ROOM (X-RAY)											
6635-018-5835	160 KVP X-Ray Units										
	(Tubehead)	1	2'2"L x 7" Dia	--	--	--	--	--	--	--	--
Comprise Above	(Control)	2	1'8"L/2'0"W/10"H	15	120	1	60	--	--	--	--
	(Cooler)	3	1'3"L/1'4"W/10"H	6	120	1	60	--	--	--	--
6635-960-1529	Tubehead Stand	4	4'6"L/3'6"W	--	--	--	--	--	--	--	--
6635-774-6967	275 KVP X-Ray Unit	5	5'6"L/3'7"W/4'7"H	17	440	3	60	--	--	--	--
6635-01-067-6315	Tubehead Stand	6	4'0"L x 3'0"W	--	--	--	--	--	--	--	--
NOTE: Doors to have interlocking system with red lights (on plan) to prevent opening when X-Ray equipment is on.											
ROOM#2 - FILM PROCESSING											
6635-053-8211	X-0Mat	1	4'1 3/8"L/2'2"W/4'1"H	45	220	1	60	--	H&C	Yes	4"
Contractor to provide for installation through wall and install exhaust duct.											
6525-616-7651	Processor	2	5'10"L/2'10"W/5'6"H	1	120	1	60	--	H&C	Yes	--
Water supply and drain by contractor											
6525-601-4500	Dryer, X-Ray Film	3	2'7"L/1'10"W/7'H	13	120	1	60	--	--	--	11"
Exhaust Duct by contractor											200 CFM
Contractor furnished and installed	Stainless Steel Sink	4	3'0"L/1'10"W/1'6"H	--	--	--	--	--	H&C	Yes	--
Contractor furnished and installed	Work Shelf Storage Cabinet Below	5	2'0"W/3'0"H/REQ'D	--	--	--	--	--	--	--	--
NOTE: (1) When safe lights are on, white lights cannot be turned on in darkroom. (2) Chilled water from cooler to X-0Mat and processor only.											
ROOM #3 - RADIATION CONTROL (CONTROL ROOM) Work shelf, contractor furnished and installed											
ROOM #4 - LIGHT TRAP TO ROOM #2 NOTE: Doors to be designed so when one is open the other cannot be opened unless master control switch is de-energized.											
ROOM #5 - FILM INTERPRETATION AND FILE											
6740-598-5772	Densitometer	1	2'2"L/1'4"W/1'4"H	2	120	1	60	--	--	--	--
6525-604-0000	Illuminator	2	10"L/1'5½"W/1'8"H	5	120	1	60	--	--	--	--
6635-018-5842	Viewer Hi-Intensity	3	1'3"L/1'2"W/1'10"H	5	120	1	60	--	--	--	--
6635-044-4421	Cooler 200 Gal	4	4'2"L/2'2"W/3'4"H	28	220	3	60	--	Cold	yes	--
Contractor Furnished and installed	Work Shelf Storage Cabinet Below	5	3'0"W/3'0"H/REQ'D								
NOTE: Above cabinet will have equip #3 recessed.											

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TABLE 1-2. GENERAL NOTES

1. 10' ceiling height required throughout facility with exception of Rooms numbered 1, 8, 7, and 12.

2. Clear ceiling height in Exposure Room (#1) should be 12' where practicable, to avoid difference in roof level. May be 14' where using command can justify on basis of sizes of components to be inspected in the foreseeable future. Door and monorail between Rooms #1 and #8 are optional. Where provided, adjust ceiling heights in both rooms to suit monorail operation.

3. Sizes of lead-faced doors into Exposure Room #1 depend on size of items to be inspected. For practical reasons they should be as small as practical for efficient operation. The door between Rooms #1 and #8 can be above floor, at any height to suit operations.

4. Materials, construction, etc. to be in accordance with AFM 88-15.

5. Building to be Type "N" unprotected, Noncombustible construction.

6. Building occupancy is 6 to 10 persons.

X-RAY AND ENVIRONMENTAL PROTECTION

A. Shielding, barricades, and warning devices are dependent on each specific siting and operation.

B. X-Ray Exposure Room #1 will conform to the requirements specified in the National Bureau of Standards Handbook 93, Safety Standards for Non-Medical X-Ray and Sealed Gamma Ray Sources. (Medical service bioenvironmental engineers or health physicists are available to help interpret Handbook 93 and to perform shielding calculations.)

(1) Shielding will be used on the ceiling only when required by shielding calculations. When ceiling shielding is not provided, a barrier limiting access to the roof of the NDI Facility will be used, with a warning light at each point of access.

(2) The design and specifications for the NDI Facility will be reviewed by a bioenvironmental engineer or health physicist and approved by the Director of Base Medical Service prior to contract solicitation.

(3) Before a new installation is placed in routine operation, the medical service will be notified and a request submitted for a radiation protection survey by a qualified bioenvironmental engineer or health physicist.

C. Design will show the cable passage betwen the Exposure Room #1 and the controls outside this room. Cable passage should be "S-shaped" and provide the same level of shielding as the X-ray barrier.

D. Reference ultrasonic cleaner and other equipment in Penetrant/Magnetics Room #8. If specifications or Technical Orders permit use of Trichloroethylene or other toxic solvents provision should be made for local exhaust ventilation.

E. If use of radio-isotopes is anticipated, this should receive consideration in shielding calculations.

ELECTRICAL AND MECHANICAL NOTES

1. Recessed lighting fixtures may be used where operationally required. Use surface mounted fixture, for economy, wherever practicable. Fixtures in Room #1 should be surface mounted if shielding is applied on ceiling.

2. In Room #10 acetylene and oxidante N_2O gas will be used. Provide 2-hour fire-rated walls and doors. All electrical wiring will meet Class I, Division II requirements. Do not tie heating/ventilation/air conditioning return air ducts in with building system. All supply air to be exhausted to exterior (explosion proof exhaust fan).

3. See Note "D" above, relative to Room #8.

4. Environmental control required for Rooms #2, #5, #9a, and #10 with 50% maximum relative humidity and temperature not to exceed 75^{o} FDB.

5. Include necessary provisions for handling waste materials containing pollutants in drainage system.

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