



United States  
Air Force



Management & Equipment Evaluation Program  
MEEP  
for  
Transportation & Civil Engineering  
(AFR 77-5)

# Consolidated Status Report

16 June - 15 December 1993



615 SMSQ/LGTV, Eglin AFB, Florida 32542-5303

DEPARTMENT OF THE AIR FORCE  
AIR FORCE MATERIEL COMMAND  
MANAGEMENT & EQUIPMENT EVALUATION PROGRAM  
(MEEP)

FROM: 615 SMSQ/LGTV  
Aug 93  
201 Blscayne Ave.  
Bldg 613 Suite 2  
Eglin AFB FL. 32542

20

SUBJ: Report on Test Results from MEEP Project EV 92-95  
Magnatizer

TO: The Magnatizer Group,  
Inc. Attn: Edwin White  
PO Box 1000  
Rt. 413 & Point Pleasant  
Pike Gardenville PA. 18926

1. The following information is furnished in accordance with MEEP Project Evaluation/Reporting Instructions as interim action on subject project.

- a. Project Title: Magnetizer.
- b. Dates of Project: From 11 Jan 93 TO 21 Jul 93.
- c. Project Description: Discussion:

(1). Background: Four vehicles at Hurlburt Field, FL were removed from service, exhaust gas emissions were tested for pollutants, and Mono-Pole (single pole) Magnets were installed. The vehicles were allowed to run for an additional 10 minutes, then emissions were again examined. Dramatic improvement in harmful emissions were noted. Vehicle technicians at Hurlburt assisted in this evaluation. The same Hurlburt Field mechanic performed all emission tests using the Bear 200 series diagnostic analyzer. This unit was capable of four gas analysis. All tests were performed with engines at operating temperature. Following the test completion period, all Magnets were removed from the vehicles and held for disposition.

( 2) . Guidelines:

(a). Hurlburt Field personnel selected four vehicles for the evaluation. Two vehicles were gasoline engine driven and two were diesel engine driven.

(b). A mechanic conducted an exhaust

emissions test of all vehicles prior to installation of the magnet system.

(c). Mr Tucker and Mr Fittsell of Mono-Tec Group Inc installed fuel system magnets using only plastic wire bundle ties. No fuel lines were disturbed or cut. A large cooling system magnet was installed on the lower radiator hose, again using only plastic ties. Another large magnet of the opposite magnetic pole to those installed on the fuel lines was installed on the rubber hose leading to the engine air intake.

(d). A vehicle emissions test was conducted after installation and results recorded.

(3). Advantages: The magnets reduced harmful emissions in the gasoline engine almost immediately after installation and continued to maintain the reduced emissions throughout the project (see emission analysis chart). The diesel engines showed an immediate reduction of visible smoke. Prior to magnet installation the 1335 bus was a heavy smoker putting out clouds of black smoke. After installation, the smoke could barely be distinguished with the naked eye.

(4). Disadvantages: None noted.

(5). Safety: No safety hazards were encountered.

(6). Savings:

("a}. Tangible savings; Exhaust emissions analysis indicate reduced hydrocarbon emissions which is indicative of .better combustion. It must be assumed that with better combustion better fuel mileage is realized. However, with the current methods of Air Force fuel issue and control, fuel consumption could not be tracked.

(b). Intangible savings: Less pollution in the atmosphere.

d. Project Results:

(1). Conclusions: The magnetizer fuel treatment system demonstrated the ability to reduce harmful emissions in both gasoline and diesel engines. The coolant magnet was not considered a significant factor when measuring emissions. Due to circumstances beyond our control no conclusions were reached concerning the coolant system magnet.

(2). Recommendations: We are recommending the magnetizer fuel system magnets be approved for Air Force adoption. Further recommend a national stock number be assigned.

e. Actions Taken: These recommendations have been submitted to Warner Eobblns ALC/LVV for review and approval of this product for Air Force use. Please note that final action has not been determined on this project and recommendations are subject to change.

2. ' This report will not be used for commercial publicity, advertisement, or sales purposes to other than Federal or Civil government agencies as addressed In paragraph 12 of the bailment agreement between the United States Air Force and Manufacturer.

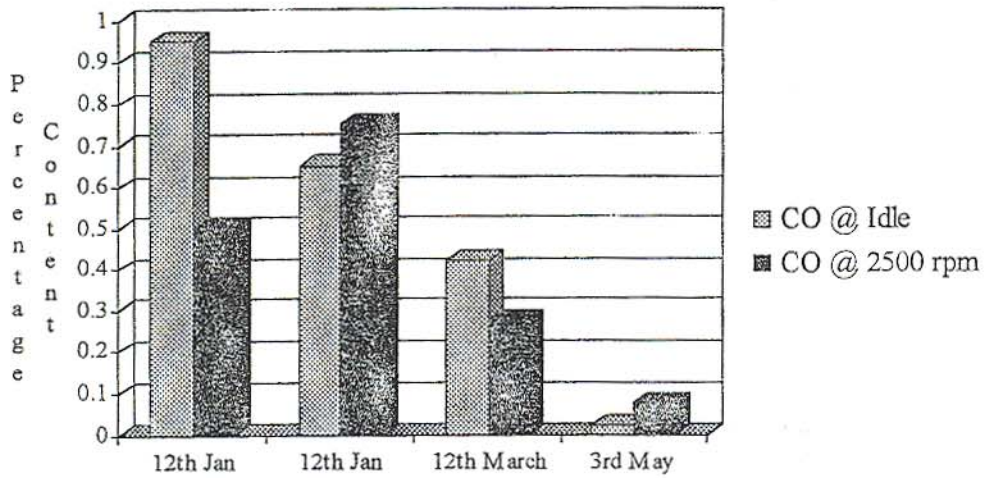
3. Point of contact 615 SMSQ/LGTV, CMSgt Rich Richards.

/JACOB L. DETUEILER Chief, Air Force  
Management & Equipment Evaluation Program

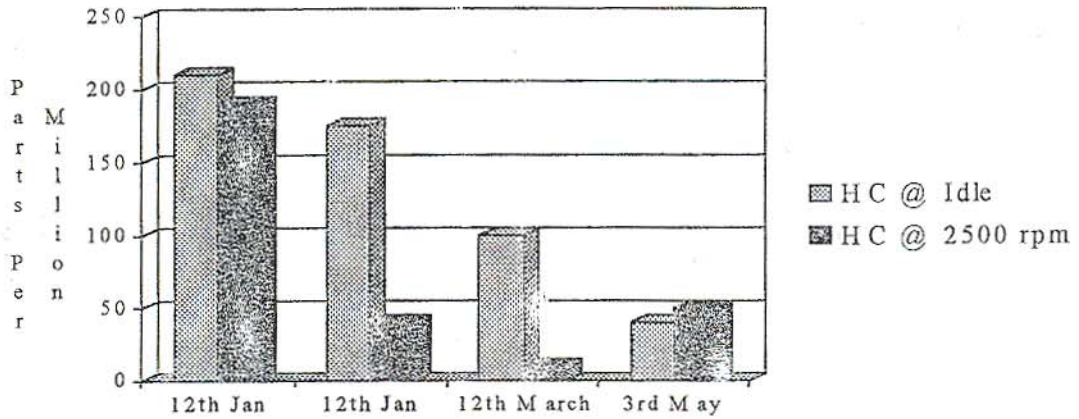
A handwritten signature in cursive script, reading "Jacob L. Detweiler". The signature is written in dark ink and is positioned to the left of the typed name and title.

# Charts A

## Vehicle 1. Carbon Monoxide content @ idle & 2500 rpm

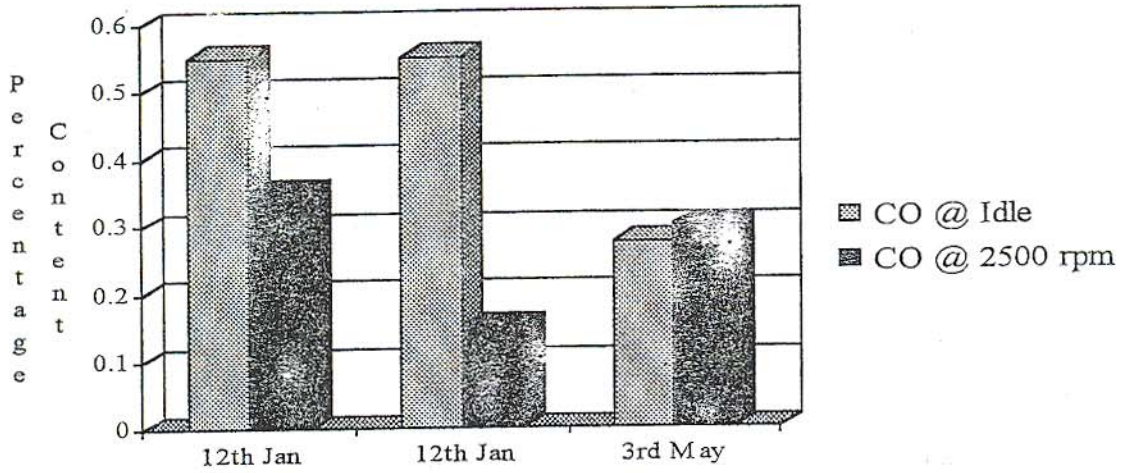


## Vehicle 1. Hydrocarbons @ idle & 2500 rpm



# Charts B

## Vehicle 2. CO @ Idle & 2500 rpm



## Vehicle 2. HC @ Idle & 2500 rpm

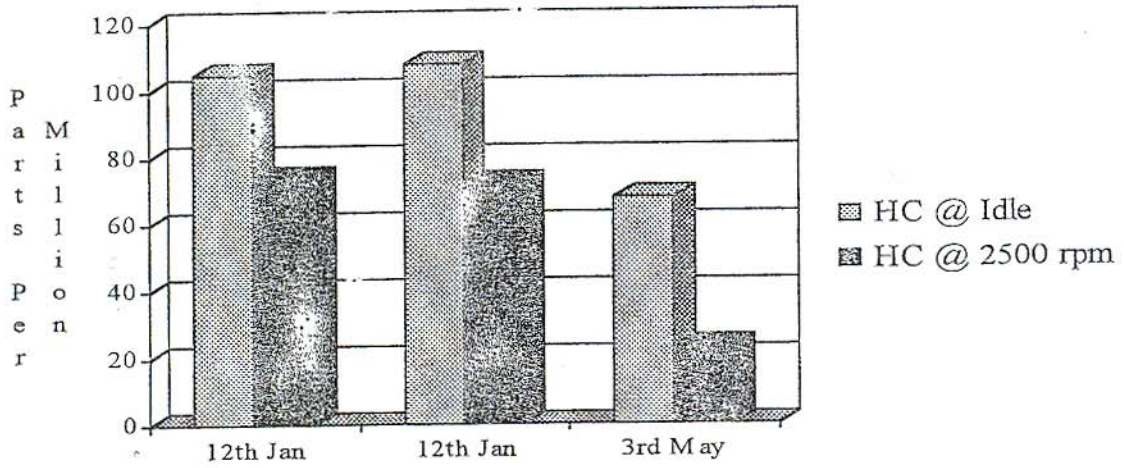


Chart C

Bosch Smoke @ 2000 rpm

