# E-SITE, INC.

P.O. BOX 0 ROSEMOUNT, MINNESOTA 55068

30-07636 30-11314

COMBAT SIGHTING SYSTEMS

KAY 2 AM 10 36

ar ign ED

April 26, 1979

TION

Radioisotopes Licensing Branch Division of Fuel Cycle & Material Safety U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Applicant... Check No ... Type on Fee LLM Received By Journ.

Ret. Lic. # 22-13585-02G 22-13585-03

SUBJECT: Condition #2 of General Lic. 22-13585-02G

In this letter of purposal, we are requesting condition #2, which states "All gum sights shall be installed on gums by Nite-Site, Inc.", to be deleted.

We can show that if the general licensee installs his own gun sight, control is not lost but actually gained.

The new method of installation is far stronger and safer. Nite-Site, Inc. has installed over 1100 model 70H and 70S gun sight units during the last 28 months and not one has been damaged or lost.

The attached information is given in hopes that our request to delete condition #2 of general lic. 22-13585-02G will gain your approval.

Sincerely,

Elliel F. Knutsen Director/Licensing

Enclosure: Information packet

Photographs of models 70H and 70S

"Simple" registration envelope and installation instructions

COPIES SENT TO OFF. OF

INSPECTION AND ENFORCEMENT

790530411

99709

April 26, 1979 INFORMATION PACKET Early Method of Installation Prior to December, 1976, Nite-Site Model 70H and 70S units were attached to weapons by the use of 3M Brand 2216 Epoxy Adhesive only. This process required a hardening time of 24 hours. The weapons were placed in a special holder to insure nonmovement during the curing process. If a general licensee requested a Nite-Site gun sight and lived a distance away, he would package his weapon and send it to Nite-Site, Inc. for installation. When the weapon arrived, Nite-Site would install the gun sight as described above. After the curing process, the installed sight was wipe tested and a required warning label was attached to the weapon. The weapon was repackaged and delivered back to the general licensee. Condition #2 of General Lic. 22-13585-02G was necessary to make sure that the self-luminous gun sight was installed properly. However, our experience during that five year period, showed that even after proper installation with the use of the above named epoxy, between 15% and 20% of the gun sights loosened and were lost. This became a problem to be corrected. New Modification and Method of Installation Referring to the letter dated May 24, 1977, Nite-Site, Inc. developed a new design to the mounting base of Model 70H and 70S. This modification incorporated the use of a screw to hold the self-luminous gun sight in place. This development is very simple and should have used long ago. On the Model 70S type, the factory front sight screw is removed from the weapon and replaced with the self-luminous gun sight and gun sight screw. This process requires approximately ten to fifteen minutes to complete the installation. Since Nite-Site, Inc. has been installing the gun sights in this manner, over 27 months, not one gun sight was lost. It became apparent to us that because of the new design, the self-luminous gum sight was a direct replacement part of the weapon, not an add-on as before. Also, because of the easy method of the installation process, we feel that having a general licensee send us a whole weapon or for Nite-Site, Inc. to travel to the general licensee to install the gun sight is no longer necessary to insure proper installation and registration. Purposal and Requirements If condition #2 of General Lic. 22-13585-02G was deleted, Nite-Site, Inc. would meet the following proceedures for control, registration, bookkeeping and packaging. 99709

- Each self-luminous gum sight would be tested for leakage and contaminatin and each such test would be certified before packaging.
- 2. Each self-luminous gun sight would be individually packaged and each package will be given a serial number.
- Each general licensee will be required to summit the make, model and serial number of his weapon before delivery is possible.
- Each individual numbered packaged self-luminous gun sight will be assigned to the general licensee's weapon.
- 5. Each general licensee will receive explicit instructions pertaining to mounting the gun sight and affixing the required warning label. In addition, each general licensee would receive a copy of Section 31.5, 10 CFR 31; Sections 30.34 and 30.51 through 30.63, 10 CFR 30; Sections 20.403, 2 and 20.403, 10 CFR 20; and Appendix D, 10 CFR 20.
- 6. After delivery, the general licensee would return a numbered invoice.

Using this system, Nite-Site, Inc. would be able to keep better control and records by using: (A) Nite-Site serial number, (B) Weapon serial number, (C) Invoice number.

## INSTALLATION SHOULD BE MADE BY A COMPETENT GUNSMITH

## REMINGTON, WINCHESTER AND STEVENS SHOTGUNS WITH STANDARD BEAD SIGHT.

1. Remove factory bead sight.

2. Clean out burrs from screw hole with 3x56 tap.

 Install Nite-Site with enclosed screw and trim off excess screw length from inside of barrel. DO NOT USE LOCK-TITE ON THREADS.

ITHACA SHOTGUNS WITH BEAD FRONT SIGHT.

Follow above instructions except use 4x36 tap to clean burrs from screw hole.

HI-STANDARD SHOTGUNS WITH BEAD FRONT SIGHT.

Follow above instructions except use 4x48 tap to clean burrs from screw hole.

Enlarge Nite-Site housing hole for a No. 4 screw.

## ALL OTHER SHOTGUNS NOT MENTIONED ABOVE - INCLUDING RIBBED BARRELS.

1. File off existing bead. Do not remove the sight.

- 2. Locate Nite-Site and mark and drill with No. 45 drill.
- 3. Tap with 3x56 tap install Nite-Site with enclosed screw.

4. Trim off excess screw length from inside of barrel.

REMINGTON, HI-STANDARD AND ITHACA SHOTGUNS WITH RIFLE FRONT SIGHTS.

1. Remove factory front sight and replace with Nite-Site steel sight.
Installation is done in a conventional manner.

RUGER MINI - 14, M-16 MACHNIE GUNS AND AR-15 RIFLES.

1. Remove factory front sight and replace with Nite-Site steel sight.
Installation is done in a conventional manner.

## CORRECT SIGHT FICTURE

ALL SHOTGUNS - BEAD SIGHT.

At night when light from the Nite-Site reflects on the barrel, the shooter lowers his eye until a single dot appears. Same principle is used for daylight shooting employing the orange dot.

SHOTGUNS WITH STEEL FRONT RIFLE SIGHT - INCLUDES BEAD SIGHT ON PARKERIZED BARREL.

At night, shooter places eye below receiver, then raises head until front selfluminous dot appears. The instant the dot comes into view, correct sight picture
is obtained. With very little practice, the shooter will be able to align dot
instinctively.

RIFLES AND MACHINE GUNS WITH PEEP SIGHTS.

At night the self-luminous dot will automatically center itself in the rear peep sight.

MAINTENANCE - TREAT YOUR NITE-SITE THE SAME AS YOU WOULD A RIFLE SCOPE.

Keep grease, oil, solvents, etc. away from the lens portion of the Day/Night
Combat sight. Do not use aerosol spray lubricants such as WD-40 on or near the
Nite-Site housing. If weapon is to be re-blued, remove the sight. Periodically
clean the lens with cotton swabs (Q-Tips).

The use of epoxy is recommended to assist in securing installation of the Bead Day/Night sight. DO NOT USE LOC-TITE PRODUCTS.

## INSTALLATION INSTRUCTIONS - CORRECT SIGHT PICTURE - MAINTENANCE

ALL DAY NIGHT COMBAT SIGHTS SHOULD BE INSTALLED BY A COMPETENT GUNSMITH.

#### COLT PYTHON, MK III AND RUGER REVOLVERS.

1. Locate and remove front sight pin(s).

2. Remove factory sight and replace with DAY/NIGHT sight unit.

 Using pin holes as guide and drill size; drill through DAY/NIGHT sight unit and replace pin(s). NOTE: DO NOT ENLARGE EXISTING PIN HOLES.

4. Install rear DAY/NIGHT sight slide in usual manner.

5. Peel off back of NRC label and attach to inside of grip.

## SMITH & WESSON REVOLVERS WITH RAMP FRONT AND ADJUSTABLE REAR SIGHTS.

1. All final fitting must be done before drilling and tapping.

- 2. Top of the Nite-Site housing should be just below the top of the steel sight.
- Spacer provided should be used only if the steel sight is exceptionally high.
   Modifications to the height could be varied by filing or sanding the spacer.

4. Drill and tap for the 0-80 screw.

5. Apply epoxy to the bottom of the sight housing and turn screw to a snug position.

DO NOT OVER TIGHTEN. USE EPOXY ONLY FOR INSTALLATION - DO NOT USE LOC-TITE PRODUCTS.

6. Install rear sight slide in the usual manner.

7. Peel off back of NRC label and attach to inside of grip.

#### SMITH & WESSON MODEL 39.59 AUTOMATICS.

 Follow same instructions as S & W revolvers with the exception that two 0-80 screws are used. Remember to use epoxy to assist in a secure mount.

#### SMITH & WESSON REVOLVERS WITH PARTRIDGE FRONT AND ADJUSTABLE REAR.

1. Modification is made to the Nite-Site housing to fit the partridge sight by cutting off the front half of housing just ahead of the base.

2. Follow same instructions as \$ & W revolvers to complete installations.

## CORRECT SIGHT PICTURE.

In daylight, conventional sights are used. At night, center front dot over rear sight bar. Impact will not change.

## MAINTENANCE - TREAT YOUR COMBAT SIGHTS AS YOU WOULD A RIFLE SCOPE.

- 1. Clean weapon in conventional manner; do not use ultra-sonic cleaning machine, etc.
- Keep grease, oil, solvents and aerosol spray such as WD-40 away from the glass lenses.

3. To clean glass lenses, use a dry cotton Q-Tip.

4. Do not re-blue weapon with DAY/NIGHT sights attached. We suggest when weapon is carried in a holster that keys, etc., are not worn on service belt where they can come in contact with rear DAY/NIGHT sight slide.

SEE OTHER SIDE FOR SHOTGUN, RIFLE AND MACHINE GUN INSTRUCTIONS.