William B. Scott
Senior Engineering Editor

2. small parachute 10 ft bucket

outbo,

- for ea side - ea of single tile

- cell mid opening c ~18" long

- 10 ft ahead of TE - 6 sq ext. ports.

Ellipsoid opening (aux) → 12" across / 18" across other axis.

(121 ports) → pattern - TAC chevron - keep lower half;

(X) Vehicles from Groom may have been moved to facil in So. Oregon?

~~Zoly in Tucson → contacted by CIA?? agent - wanted to talk to her about person + psychic aspects of "contact phenomena":~~
~~- 1) Mel Noel~~
~~2) Guy Farnsworth~~

small holes from China Lake - [illegible] residues of [illegible] vehicles

AVIATION WEEK
& SPACE TECHNOLOGY

William B. Scott
Senior Engineering Editor

Mark – 8/13/90

Brief (new discussions w/him): Unmanned a/c

? tires made of asbestos?

- Ldg gear → trailing-type – like F-18
  - stood 8-10" below ldg lights
- 4-wheel on a truck
- tire ~4 ft diam – squared off/flat in cross section; wheels → like racing tire/wheel
- rolling matl – greyish/fibrous matl.
  - looked worn
- inside wheel wells painted white; only gear opening only; gear doors closed.
- paint on gear → lots of heat/baked look – tannish brown
- 6 diff openings on top → small – intended cooling? – semi-NACA type ducts under side of wing. – 30" long –
  - beautiful → like NACA scoops – single too.

McGraw-Hill

AVIATION WEEK
& SPACE TECHNOLOGY

William B. Scott
Senior Engineering Editor

12/7/90

Don —

I'm faxing sketches of a Mach 6-8 vehicle that our elusive Brad saw at Norton AFB in '88. He said Mark's drawings in our Oct 1, '90 issue were close, but not correct — vehicle is more diamond-shaped than triangular. (Mark had worked from Brad's verbal description — not a sketch.)

I'm working up a set of notes to send you from the interview w/ Brad on 12/3 — possibly today, but probably on Mon.

Regards,
Bill

McGraw Hill

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Regards,
Bill

McGraw Hill

ello Bill,

An extract off the Net that kind of piques my interest, relative to Brad's schematic of the circular vehicles, and how Brad explains they get power. The paragraph below, and following Net posts, on earth resonance, I feel, might be related. This is a claim which shouldn't be too hard to find more information about in Tesla biographies. If Brad is correct, and Cheney is also correct about Govt. secrecy, this might be one of the reasons some of Tesla's work is still classified. Of coarse, if it's all a hoax, then maybe this is why Brad's schematic looks just like a large Tesla coil (ie: the 'antenna surrounding the amplifier').

Brad's quote that 'the 3 bears' had no power generation source seems to fit with a phrase in Good's "UFO's Beyond Top Secret" (MJ-12 papers), that the Roswell disk had no engine. Of coarse the hoaxer could also maybe extrapolate from that as well.

We really have to build one of these, once we learn more, to settle the argument.

From: bill@bert.rosemount.com (William M. Hawkins)
Organization: Rosemount Inc., Burnsville, MN

I just finished reading "Tesla - Man Out of Time" by Margaret Cheney.
...

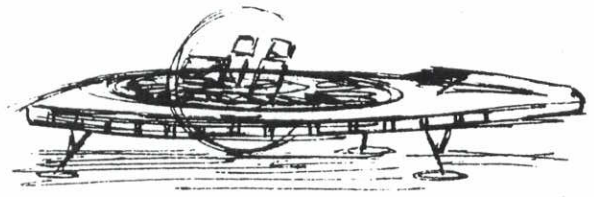
Tesla tried to get funding from the Government with proposals for various machines of war. ...
He even thought that resonance could be applied to the earth, in order to cause earthquakes remotely.

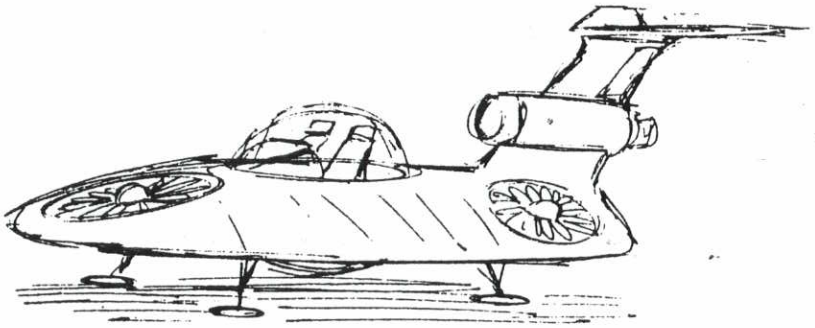
— Bearden?

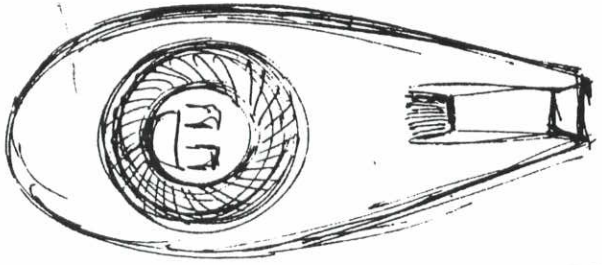
Now for the part on Government secrecy. When Tesla died, his voluminous papers were siezed by the Office of Alien Property, since he was Yugoslavian. Margaret Cheney could not get access to them for her research in 1980! In a postscript to her book, she writes, "What else may be in that intriguing file, I do not know. Nor do I withhold the name of the research agency possessing it merely to tantalize the reader; my only reason for doing so is that the U.S. government has deemed the material important to national security and has been at great pains to conceal its existence."

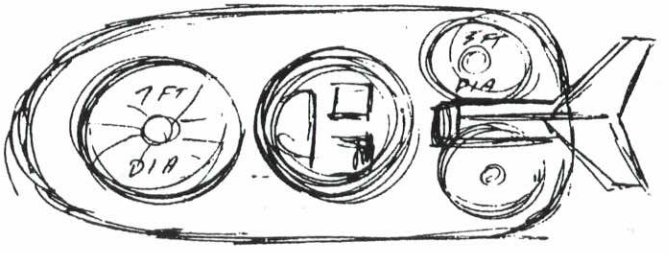
From: glen@zeus.opt-sci.arizona.edu (Glen Sonnenberg)
Organization: Optical Sciences Center, Tucson, AZ

I thought that this might be a good topic of discussion. I was interested in finding out any info on Tesla coils (I think that's what they are). The idea that I am talking about is that you could make a coil really large that got some energy from the natural vibrations





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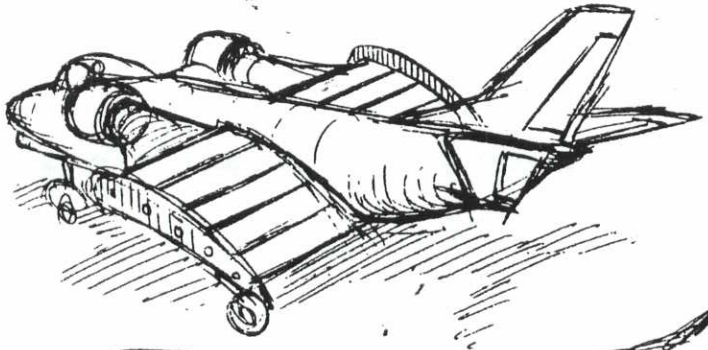

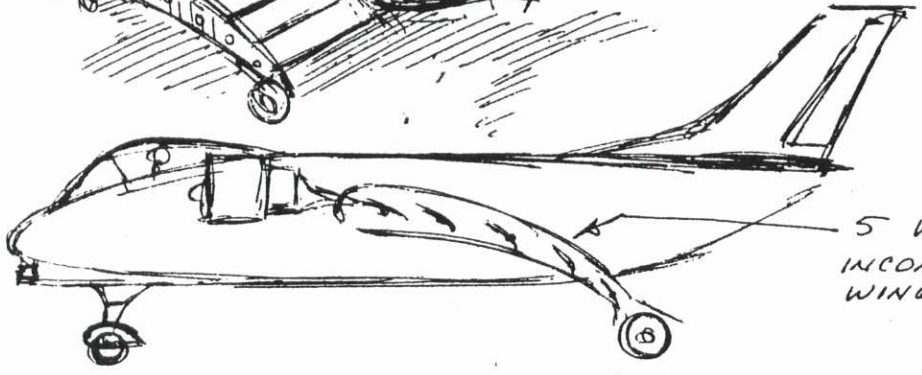
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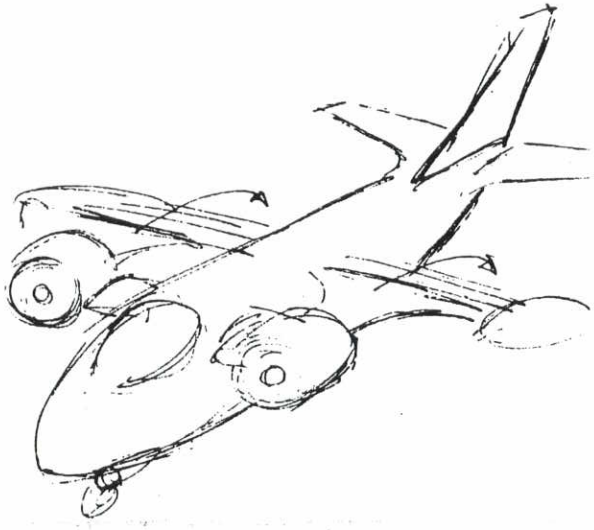


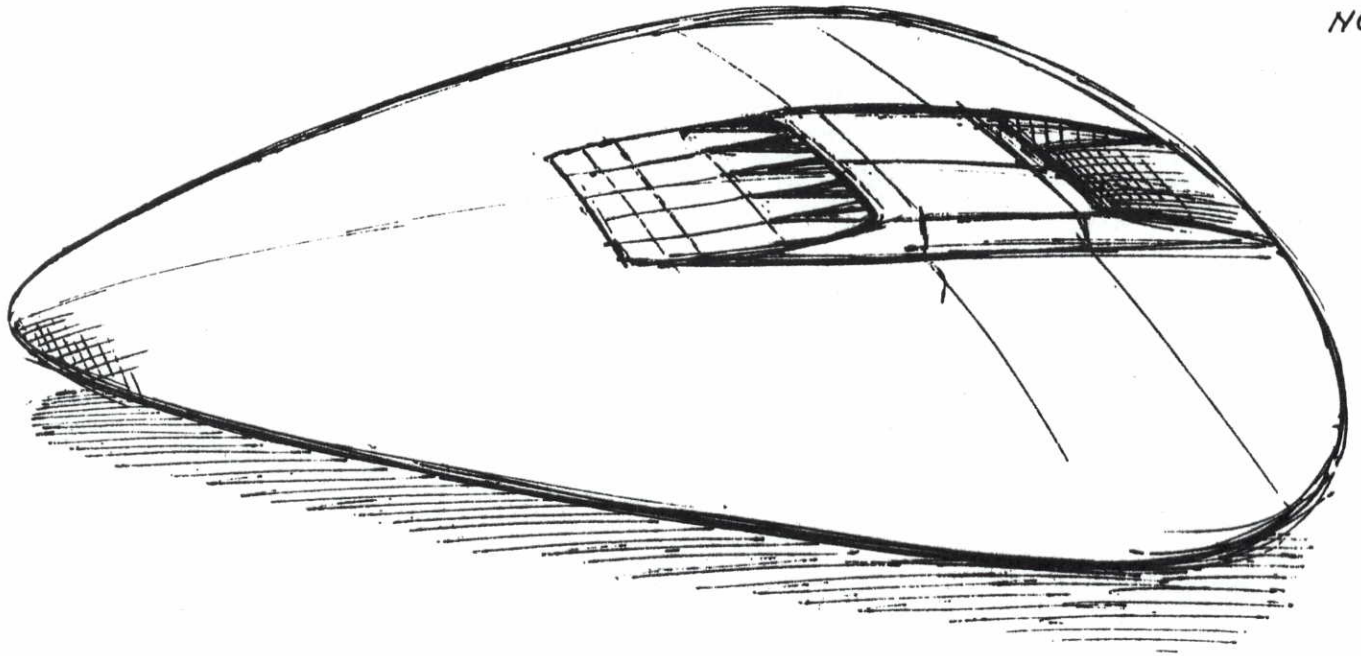
FAX - 212-586-5562

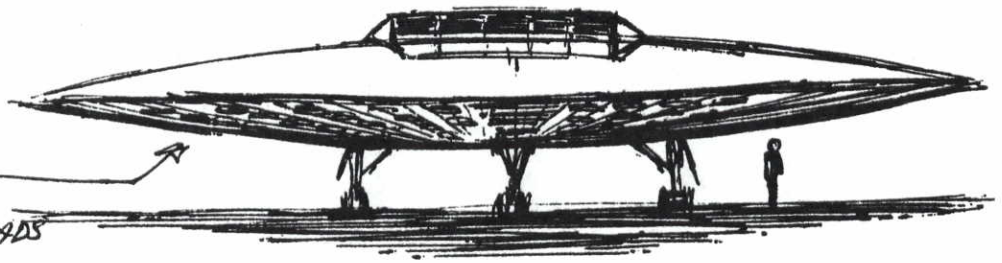
FROM. MARK McCANDLISH
(714) 820-2265

(1)

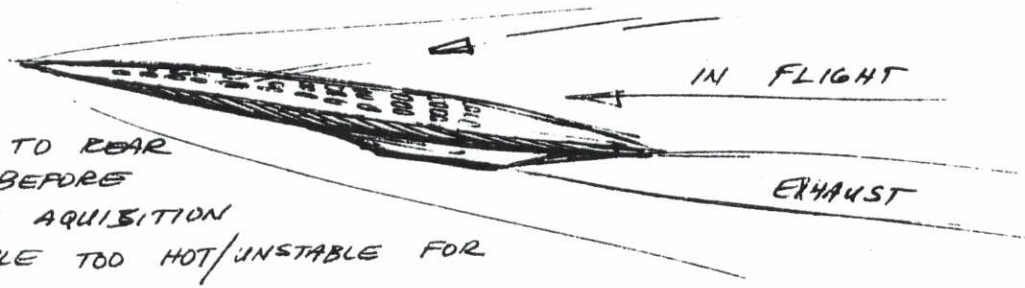
AS SEEN 12 NOV 88
BY EYE WITNESS
IN HANGAR AT
NORTON AFB, CA.

AURORA(?)





123
ELLIPTICAL
PORTS FOR
NUCLEAR WARHEADS



IN FLIGHT

EXHAUST

NUKES LAUCHED TO REAR
AND STABILIZE BEFORE
RE-ENTRY / TARGET AQUISITION
(UNDERSIDE OF VEHICLE TOO HOT/UNSTABLE FOR

- UNMANNED RPV
- LANDS INVERTED
- ABOUT THE SIZE OF A 727
- 123 NUCLEAR WEAP
- MACH 8 CAPABLE
- OPERATIONAL 5 YR (AS OF NOV 1988)
- COVERED WITH BLACK HEAT ABSOR TILES
- USES UNDER/OVER SCRAMJET - CONVENTN PROPULSION.
- SLUSH-HYDROGEN FUEL

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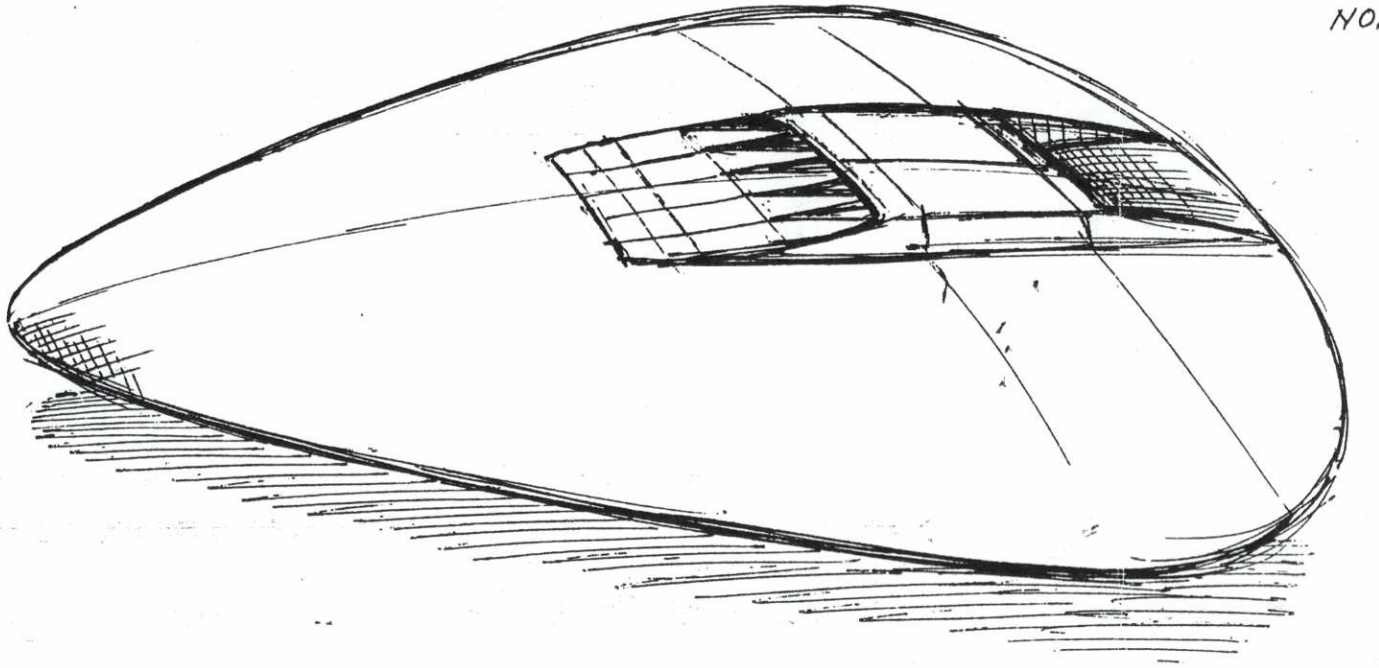

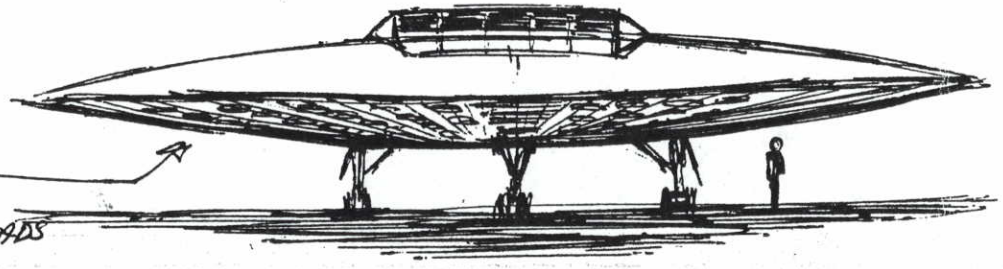

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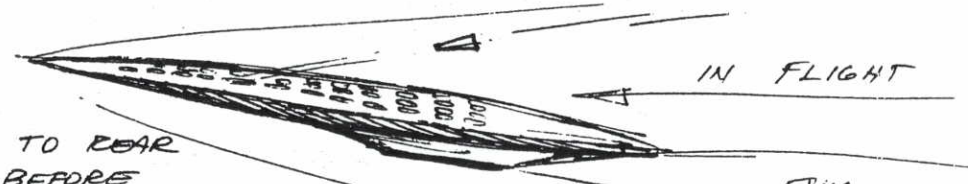

IN FLIGHT

EXHAUST

NUKES LAUCHED TO REAR
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RE-ENTRY / TARGET AQUISITION
(UNDERSIDE OF VEHICLE TOO HOT/UNSTABLE FOR
"DROP LAUNCH")

- UNMANNED RPV
- LANDS INVERTED
- ABOUT THE SIZE OF A 727
- 123 NUCLEAR WEAP.
- MACH 8 CAPABLE
- OPERATIONAL 5 YRS. (AS OF NOV 1988)
- COVERED WITH BLACK HEAT ABSORB TILES
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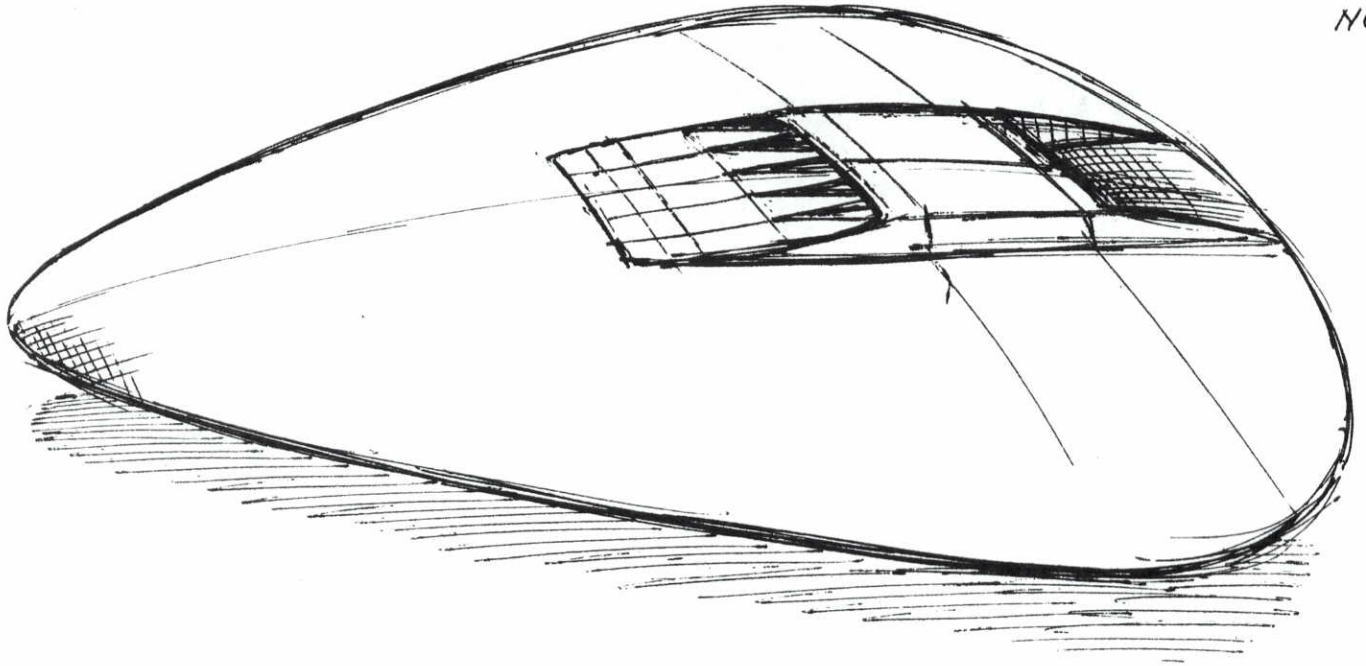

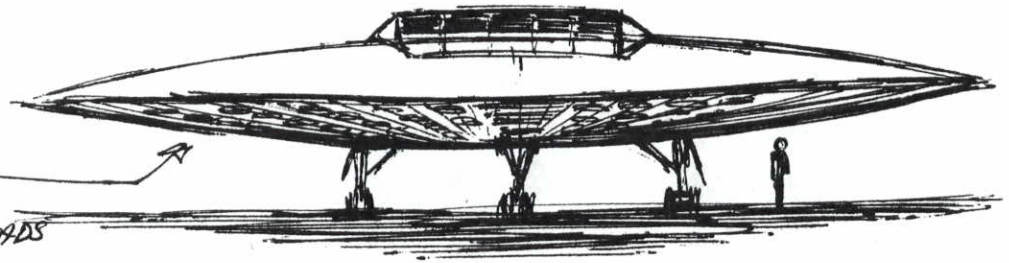

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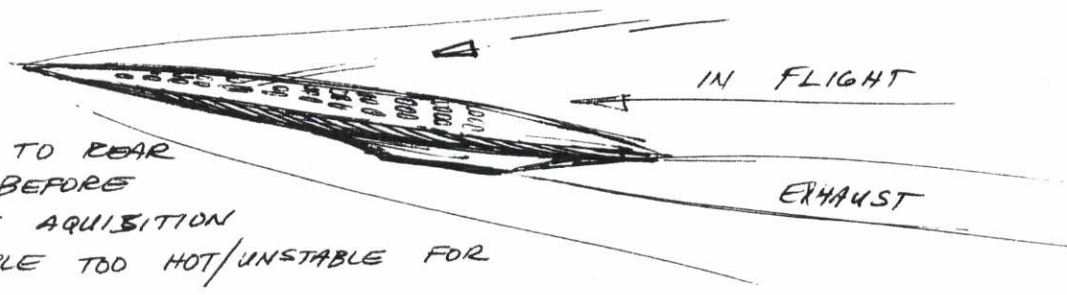

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COVER SHEET

To:

12/26/90

Name: BILL SCOTT

Company: AVIATION WEEK AND SPACE TECHNOLOGY

FAX: (805) 942 - 3816 Today's Date: 26 DEC 90

From:

Name: MACK MCCANDLISH Number of Pages: 3 (including cover sheet)

Comments: BILL, THIS RATHER SHOCKING NOTE ARRIVED X-MAS EVE. I WILL CALL YOU LATER TODAY ABOUT THIS SOURCE. HE WAS WORKING ON A BOOK ABOUT STEALTH A/C. MAYBE HE'LL GIVE YOU AN INTERVIEW — HE HAS NUMEROUS SOURCES ALSO.

regards, scott

NNNN
[et

Resent to Mark on
9/12/90

August 20, 1990

Dear Brad:

The vehicles you saw, and the briefings you heard about those aircraft in November 1988 correlate very well with bits and pieces of information Aviation Week has uncovered over the last few years. We are quite interested in learning as much as possible about these vehicles, primarily because their proven existence could significantly impact government spending during the 1990s. In particular, if a hypersonic, stealthy, nuclear-capable vehicle is being deployed operationally, then why should this country invest billions in a B-2 strategic bomber?

These questions--and the answer to them--are of great interest to Aviation Week and the American taxpayer. Your experience could be a tremendous asset in trying to prove many of the things we have heard and seen about advanced aircraft operating from secret locations in the southwest.

I also understand your reluctance to discuss this subject with me or anyone else. Until now, you have had little to gain, yet much to risk, by divulging anything more. To at least make it somewhat worth your while, I can offer you $100 just to meet with me and relate what you saw and heard at Norton AFB. If we elect to use the material you provide in a story, you could negotiate additional payment from our editor-in-chief, Don Fink. Only he is authorized to do so.

I can assure you that only I will know your full name or how to reach you. That's just the way Av Week works--everybody guards his own sources. If I write a story based on your descriptions, nothing will be said that could link you to the information--again, that's how we operate; we are used to protecting sources. Please consider this and, hopefully, we can meet in the near future.

You can call me at 805-942-2326 or contact me through Mark. Thank you for your consideration.

Regards,

William B. Scott
Senior Engineering Editor

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OUR PHONE #: (714) 874-1230
OUR FAX #: (714) 874-4575

COVER SHEET

TO:

COMPANY: AVIATION WEEK

NAME: BILL SCOTT

FAX #: (805) 942-3816 TODAY'S DATE: 13 DEC 90

FROM:

NAME: MARK McCANDLISH NUMBER OF PAGES: 2
(including cover sheet)

COMMENTS: UNABLE TO REACH BRAD OR GET HIS FAX #. I WILL KEEP TRYING —

PMWS
.PMWS

[fivistsz [quwn-aw [ms-vista-caption-scott-12-17-90 [toaw [bt

12/17 12:24
35/591000/

don fink avwk ny
dave north avwk wa
paul mann avwk wa

vista - caption (scott) - one LD fedexed to ny by artist (McCandlish) on Sat; should be in ny on 12-17

caption:

An unmanned diamond-shaped hypersonic vehicle has control surfaces on leading and trailing edges, and 121 ports for dispensing nuclear warheads (insert, lower left). Conventional powerplants boost the aircraft to supersonic speeds, where an external burning mechanism takes over. Surfaces are covered with ceramic tiles. ~1 line

Fuel is sprayed over the ext body and ignited by heat or other means.

regards, scott

NNNN
[et

Pg 1 Ln 27 Pos 0

MANN
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[fiBIOscott [quwn-aw [ms-vista-bio-scott-12-17-90 [toaw [bt 12/17 12:24

35/591000Z

don fink avwk ny
dave north avwk wa
paul mann avwk wa

vista - bio (scott) - per M. Stearn's request

William B. Scott is senior engineering editor for Aviation Week & Space Technology's Los Angeles bureau. As a flight test engineer graduate of the U.S. Air Force Test Pilot School and a civil commercial pilot, he has logged over 2,000 hr. on about 45 aircraft types. He ~~has a bs degree in Electrical Engineering,~~ spent 9 years in the Air Force and ~~worked several years~~ in the aerospace industry ~~as~~ a flight test engineer and program manager.

regards, scott

NNNN
[et

Pg 1 Ln 29 Pos 3

12-17-90

Don:

Here is a set of notes from the Brad interview. Although I assured him only I would know who he is, I feel this spook aircraft business has gotten to the point where at least one other Av Weeker needs to know everything I do. Therefore:

Brad Sorenson
818-792-4766
Sorenson Design Associates
701 So. Lake Ave., #405
Pasadena, CA 91101

I have some doubts about some of what Brad said, only because the saucer-looking stuff sounds so unbelievable. During the interview, I just tried to keep him talking rather than get into an argument and have him clam up. To his credit, he struck me as a professional, sincere individual who was relating what he saw, regardless of whether it made sense or not. While confident of himself, it was clear that he felt uneasy talking about the circular vehicles, simply because it sounded so outlandish. Until I see them for myself, I'll have to reserve judgment.

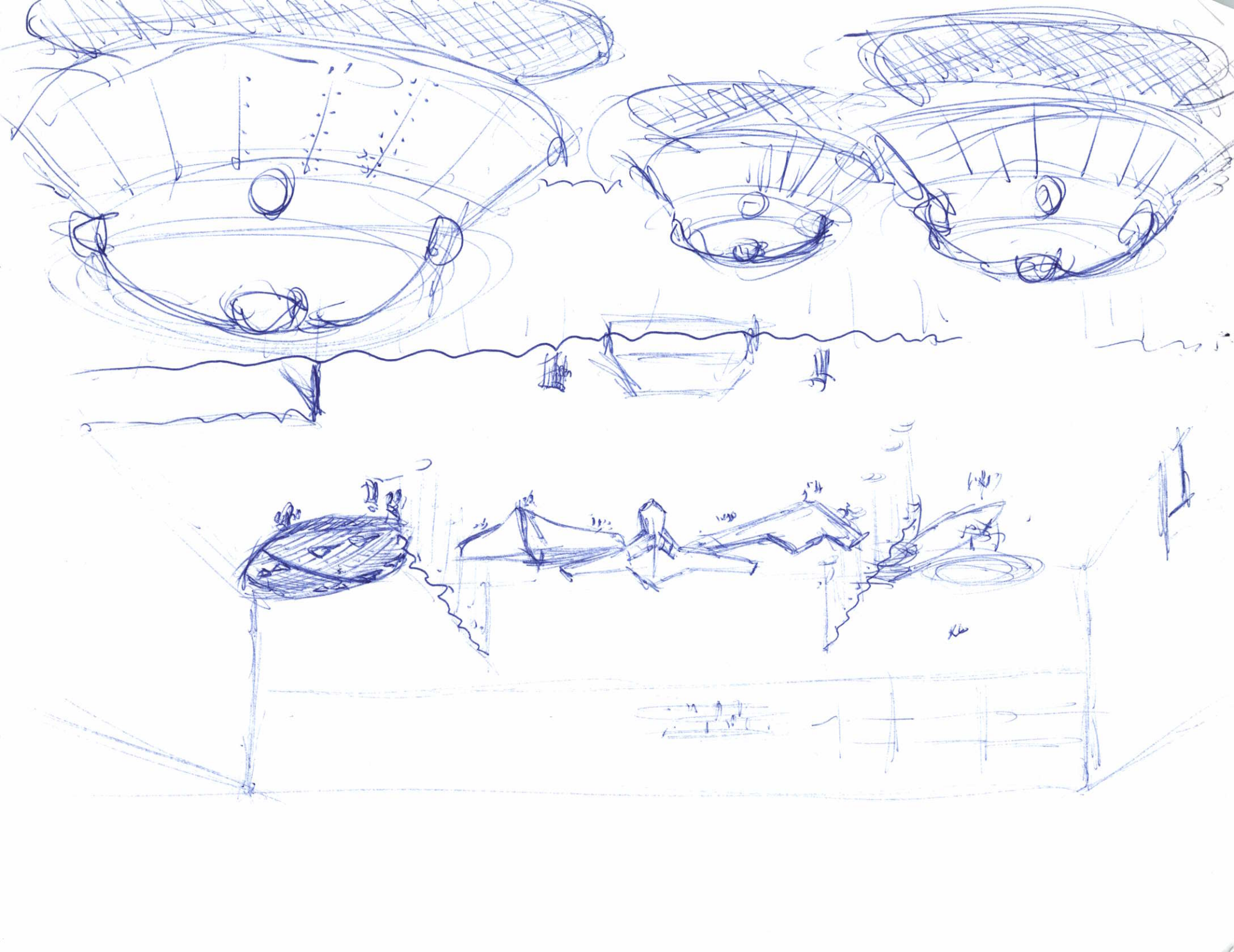
I have run the sketches Mark did for us by Maverick, and am awaiting his reaction.

Second item: I received a note from Phil Klass in today's mail, with a copy of that MUFON journal article. Now I understand your reaction today. We will obviously talk more about this later, but let me assure you: I did NOT submit to an interview with this Hamilton guy! HE called ME after our Oct. 1 stories came out and wanted to report a sighting HE had of a big vehicle west of Lancaster last year! There was never any mention that he was writing for this rag, and there was no hint of my being interrogted.

When he asked what I thought the "exotic propulsion" could be that I mentioned in the Oct. 1 stories, I said I didn't know. He asked if I thought it could be "anti-gravity" means. I replied that it could be anything; I simply didn't know, but I felt that a good scientific approach is to keep one's mind open to any potential explanation. From that, he extrapolated to what you saw in the piece I assume you received from Phil.

Looks like I got burned on that one, and I assure you, I will never talk to his ilk again! More later....

Regards,



NOTES FROM INTERVIEW ON 12-3-90 WITH "BRAD"

COMPILED 12-11-90; SCOTT/AVWK LANCASTER

Brad is the source of artwork done by Mark McCandlish and featured in AVWK's Oct. 1 issue. Mark had painted the two aircraft from verbal descriptions provided by Brad, who refused to talk with me last summer. He preferred to "let the whole thing drop; it never made me a dime, and has hurt my own business and professional credibility." He said on 12-3: "I wish I hadn't even seen those things; they've been nothing but trouble for me since then."

Through Mark, I finally convinced him to talk with me. He agreed to a one-hr. session in his Pasadena office, pointedly telling me that he gets $200/hr. for his time, and one hr. was all he could give me.

Brad: A mid-30s designer; grad of Pasadena Art Center, taking engr'g. classes at Cal Tech now "to keep up." Is a very successful designer, having clients such as Rossignol(?) skis, Mazda (new RX-7 design, beginning in '86), electric toothbrushes, motorcycle helmets, etc. Has own design business, including prototyping shops. Well-connected in high-roller business community of Southern Calif., according to Mark and Brad's own name-dropping. Claims to be a private pilot, but didn't seem to have a lot of knowledge about military aircraft types. Is interested enough, though, to go to mil. airshows.

His account: Was invited to airshow at Norton AFB, Calif., in early Nov. 88; before B-2 rollout, and around pres. election time. However, was NOT officially invited to hangar where saw the strange aircraft. "In fact, they (hosts of meeting) still don't know that I was even there. I was introduced as an aide to a gentleman who I had been doing lots of work with. He was in the Carter administration, and they wanted him on the Bush team. Because he is a very organized, straightforward, honest, etc. guy. In fact, he's a Democrat, which is not in keeping with the Bush admin. at all. .... [Is a technical type]. Runs a business of injection molding and special materials...has about 6 businesses. Generally, an incredibly bright person, who would have been a feather in cap of Bush admin. So, he was invited to this thing.

"I'm just a good friend, and we both love airplanes. I'm a pilot, he's a pilot...buddies in that sense. He was invited to this thing, so, since I was at the [Norton] airshow with him, I just went with him [to the show-and-tell]. He just told me to be a fly on the wall, and, if I had to wait outside for him, fine. " ....He was invited to this; had to be there at certain time/place. "But he didn't let me know this, until that day....I was pleased just to be there....Thunderbirds, etc. [talked about SR-71 being there, flying; had cockpit open, people looking in; "unbelievably non-secret] "I learned later why it's not that secret anymore, cause there's been 2 or 3 generations after that ...just aren't public knowledge. That's all there is to it."

"I don't know why I'm telling you all this,.. cause I love America and the whole 9 yards, but I'm also a Democrat and I don't think we need this type of spending on military equipment; it's just nuts. And that's what the whole [meeting] was for--appropriations of billions of dollars to develop new craft."

[Interpreted this show-and-tell to get people to provide more money for it?] Yes; it was showing prototypes...or just vehicles of all different kinds that they wanted money for. So they were trying to impress us. Needless to say we were impressed!...[group had about 30 or so people who were invited].

[I'm still trying to figure out who put this on.] "Me too; look, we got there a little late, so we didn't get in on the introductions of people or...frankly, I'm a mechanical person. I really wasn't taking much stock of the people there. From the time I walked in the door, my mouth was open. I'm a car designer; boy, when I see new stuff, it just turns me on! I have to admit, I just spent most of my time with my face pressed up against the glass of bubbles on these things, and looking at the materials, and the incredible processes that must have gone into creating these prototypes....and how logical everything was, and yet, new!"

[was all new, or was some...stored in a warehouse..?] There was a plan to the presentation they made; it went from the more conservative to the more advanced vehicles. They had obviously spent some time and effort working this thing out. Had some areas where they showed video tapes; some where had overhead projection kind of things--pictographs, etc. Really quite well done; but done in a military kind of way.... I don't know how to describe that--not in a Hollywood kind of way; a stiff military presentation....very structured.

[who doing most of the briefing?] "Diff. in each area; like a specialist in each area; some wearing suits, some wearing military --like Air Force ...Colonel, major, something like that. I did NOT see any stars in there--like generals of any sort. If there had, I would have noticed that."

[types of uniforms?] "Blue; Air Force; course, there were a lot of suits, too, so couldn't tell whether they were civilians or some other government branch, like CIA or whatever.

"I need to keep this to about an hour; have to drop off some things and get to the bank... so ...

[looked at drawings I had brought; those sketches Mark gave me] "Now this is one I drew [the Marine craft, blown segmented wing]. [did it say Marines on it?]--"yeah; but it wasn't specifically for Marines. That's a pretty wild little craft! [What for?] Vertical takeoff and landing; tank killing.... look at that gun; they said it was the same one used in the A-10 warthog....massive thing. They were very specific about it firing shells made out of radioactive....spent uranium. [uranium enriched]. They said that made up most of the weight in the craft.

"Looks like Mark did some interesting drawings here, but he didn't really know how they were built; he was doing all this second hand. [marine a/c, tho, brad did]. It was a tight, short....you could park it in here! Neat thing! ....Looks like what you'd need to land in a jungle; do your thing and take off. Like a little car. [twin jet..]

"Most conservative thing they had in there was an a/c with tiltable rotors. Later, I recognized it as a V-22...was pretty conservative, but they showed it cause they were trying to get funding for it. They said it was a current concern; they needed funding for that immediately. You know, 'Can we count on your support?' "

Crowd: Cranston was only one Brad recognzd. All were about 45-60 yrs ~~old; all~~ looked senior. No support people; no staff; was just THE people...[principals only]. "The presenters were extremely well dressed, but the people who came [the group being shown everything] weren't dressed very formally...cause it was 100 deg. outside! So, golf shirts, etc. But, really, I didn't spend much time looking at the people. I was busy looking at the hardware. [most of which you had never seen before, right?] I'd seen the V-22 before [contradiction? see above], but this little short tank-killing thing was just amazing. The first wing here [see diagram] and part of the second one here were obviously bare metal--like inconel or some high temp metal. And it blew the exhaust right across the top of the wing....to make a tremendous lifting surface. They showed some video on a TV of this thing in operation and it was great! It would just leap into the air...then just cant this collection of wings forward--just like blown flaps, okay? Then whoom! would just take off; looked like Top Gun [very maneuverable?]. Very. When came in to land, it would just flare like an eagle, and put its back wheels on the ground and shut off its engine.....was extremely agile! A great little vehicle. Sort of an extension of a harrier kind of thing, but real small. Even the Harrier--which is pretty small--is huge compared to this thing.

[in the video, what kind of background shown? forest?...] No, they showed....like was on a base or something; concrete, hangars. No grass; was on an airfield--like hangars and a wide expanse of concrete. Was just flown from there; hopped into the air, then whoom! went straight ahead, then banks, and split-s's and couple of loops then right back down in front of you and wham! lands. Just looked undefeatable, you know; like you could shoot at it and it could get out of the way! [any markings on it?] Yeah, it was painted...camouflage; sort of a medium green and gray, soft pattern. Modern camoflg; like what would see on an F-15 [???], something like that. [C-141...?] Yeah, but the 141s are lot darker; this was sort of a medium color; like camou that worked well against a forested backgnd or against a sky, cause had grays in it. I'm not an expert on camouflage, but....that's what I remember about it.

"It's mainly fuel tank here in the middle, they said. Was a good little vehicle to look at, they said. [Anything said about it's

status?] Needed funding. Everything ....they were very clear: It was prototype; they wanted to have their [attendees'] support. It was obviously very important to them. It was all commercial.

"They sort of staged it in several different rooms. Was one big hangar, but everything was parked so close that the wings would ...be above the others in the hangar. Was an unbelievable assemblage of stuff in a small area. Like the hangar deck of an aircraft carrier. [clean? Not a lot of dust?]

"Hey, these looked like one-off prototypes. I'm a professional--I make cars, trucks, whatever. And this was NOT production in any shape. You could tell it was hand laid up; made by the inventors; not made by some multi-million dollar....like Northrop or something. So, what they'd done was put up some metal rods as separators and hung black cloth on them. You would come into one of these 'rooms' and concentrate on this...thing. Okay? They wanted....the attention focused on this thing so they could get somebody to purchase this vehicle..... It was like a showroom--just like a car showroom--good analogy! I've had car salesmen work a lot harder for a lot less money! They gave some figures, but they needed billions of dollars to do all this stuff....and when they asked....everybody sort of looked at their shoes....and nobody would commit to anything..... So we'd move from temporary enclosure to temporary enclosure.

"Next enclosure was rather large, and they had 3 craft in there. One looked extremely, extremely like the B-2 bomber--the flying wing. Very homely looking craft. [same smooth surfaces, like B-2?] Well, they had 3 vehicles--looked like 3 for the same use. Maybe the one that looked...like the Northrop one, maybe in fact was the Northrop one--prototype or working model or something. Cause the other 2 were totally different. [did they say this was the Northrop one?] No, they didn't; I'm extrapolating from what I saw later (northrop B-2--like deja vu). Course, later, saw B-2 picture with a/c at a distance; when you're standing next to this vehicle, staring at a wheel, it's a little diffic. to get a total picture of what this thing looks like. ... But they didn't know who they had in that room! I could draw anything (laughs)! I could do a rendering--like these you see on the wall here--today, right here--no problem.... I was shocked by the wingspan--extremely long, and [body] was very short. ...Frankly, I fly airplanes, and I wouldn't feel too good getting in this one, cause it looked like it would...be hard to control.

But that one looked like a snap--the curvilinear one--compared to the faceted ones. They looked like the ...F-117. They were faceted, and they looked unbelievably ugly; looked like flying phone booths, know what i mean? [same general size as the other one?] Yeah, little smaller; shorter; about the same landing gear. It was funny; it looked like they all used the same source for the landing gear! But the other craft seemed to be ...concerned with radar than sleekness.

"One of them had a really interesting surface, too. It looked like it was wet; like it was oozy--I don't know how to put this.

Like they had spread black mud all over it. [like tar?] Like hot asphalt, okay? That's about as good as I could put it.

[phone call interruption]
They told us that "Back in World War 2, Germans had come up with something really brilliant. They put horsehair in an oil-based-like glue, and put that on their periscopes of their U-boats. They went over all this history about WW 2, the British use of radar...was really putting Germans at disadvantage.....

"It looked like they had 3 competing products there; they wanted money for all of them, but maybe one would win....[are we still talking about the B-2-kinds of vehicles?] They're all B-2 kinds. [Those 3 were competing? Like 3 diff. technologies?] They didn't seem to want to say that, but yes. Three completely diff. ways of solving the same problem. Now, that's something they did say--3 approaches to the same thing. ....Trying to hide an airplane. Some were using facets to reflect radar away from its source; some were using absorption, and some of them wouldn't reflect anything back to its source, and some were using complex forms that never...[end side A of tape 1]

Side B/tape 1: "...incredible waste of money....espec. when we have better stuff. So, we have 25 minutes; I have a lot to cover. [let's get into more of the exotic stuff...] OK, but two more main areas. The next area was extremely advanced; something that I had...no inkling of.

**"This vehicle was unmanned; [drawing sketch]; from a plan view, would look like a kind of elongated football shape; sort of diamond-like, but very rounded corners [referenced Mark's sketch], but was more tapered towards the back. See this one? Take this one, flop it around and put same on the back [butted two of Mark's triangles back to back, making a diamond]. [sketches his own; "more like that"]. Now, this side view, I'm having to guess a bit, based on just looking UP at it. [how big?] VERY big! As big as the wingspan of a B-2. [that'd make it 172 ft. or so in length?] Maybe; no,...maybe 100-110 in length; maybe 60 ft. width. I'm just trying to.....sort of getting an angle...

[now, was this the one with ports on it?] Yeah; 121 of them. They were very proud of that! [what did they have to say about them?] That they were 121 cylindrical nuclear weapons, and that they were similar in design to nuclear howitzer shells, if that makes any sense. And, they had a little schematic on the wall that showed these little vertical towers [the chambers in which the nucs stood; drawing] like so....like this big around...just clustered in the center of the airplane. When they were utilized, there was....here's a drawing of it.....something like this [my observation: Brad drew very quickly; no hesitation.] Well, let me just draw you a schematic of it...Hey, they wanted billions to build this one, too! But they said they already had some flying units of this thing, and they showed some pictures of it. Will show you more about that in a minute.

[he finished sketch.] This is kind of neat; this is the bottom

of the airplane; they had 121 of these units stacked together like this; they had little barbs, if you will, holding pucks of ceramic material--space shuttle tile stuff. And it had several layers of insulation inside, like that. Then this howitzer shell thing here. Then another thing of ceramic up here [at top end of shell] with a big spring. When they wanted to drop this thing out, would hit control that would arm this, then open barbs and puck and [shell] would be forced out and this one [puck] up here would take its place. Know what I mean? This hole would be open a very short time. [these shells stacked on top of each other?] No; all horizontal [parallel, one layer] like this. ...[sketching] the little barbs would open up, then close, and the second puck would come down and hit the bumps and the spring would be extended, like that. So, all they had to do, very simple, by remote control, was go 1, 2, 3, 4...however many they wanted. They emerged....

"Of everything in this place, I thought this was a pretty good design....they merged like this....?? as the spring started to uncoil.....Once hit bottom, looked like that. [they actually ejected these from the top inflight, though]. No! [then, from the bottom inflight?] From the bottom, inflight. [showed him Mark's sketch, showing RVs ejected from top surface] Is this a Mark drawing? He misunderstood something....and this isn't right, either. This [what Mark sketched] is what Mark thought. But it had this shape...[with no inlet].

"Now we get into the fun part. [started on new sketch at top of sheet]; we're looking at some real spindly landing gear....gear was very different from the B-2 type of landing gear. These wheels were the metal roller type. Ones that looked like the old roller skate wheels? But these had like asbestos on the outside; not rubber. They were titanium-spun cylinders, with just a little material on the outside; looked like was fireproof, but might give a little bit of traction. [looks like a very light design] Oh, god, everything on this thing was light, except the.....looked like...space shuttle tile; the whole thing--black; and well used, by the way! <u>It looked pretty burned and old; like it had seen a hell of a lot of use!</u>

[any streaking on it?] Yes, burned places; sort of a patina--do you know what a patina is? [yes] Crystallized from high temperature, high speed use. [sketching again] You know, when Mark was talking to me about this, I didn't know he was going to be doing an illustration of it. But, ...it has a little bit of a thing ....[depression on the forward area of the craft]....centerline goes thru here; this is bottom. Now, this is where [mark] got screwed up. When the thing was on the ground and accelerating, taking off, it used <u>internal engines. When it got up in the air, they didn't use those engines anymore, so those things [inlets/exhausts] closed.</u> In fact, mark did an excellent job of illustrating that for your magazine. you know, sort of NACA-duct kinds of things; NACA in the front and just plain, round slot in the back. But they were designed so.....the naca ones in front would open up like so [sketching ducts] ...and ....I didn't see the engines, but would think they would be in

here, with the jet like so....[sketches ovals for engine locations]... jet engine here with its exhaust back here; like a vented...tunnel...like the B-2.... Here it is; this door would open up, allow air in the front, through the turbines and out the back. [Note: NACA ducts are typically only effective at subsonic speeds; not really feasible for supersonic; could have a movable ramp, though, to reshape inlet?]

"There was virtually nothing to slow this thing down. It looked like speed incarnate; like a flat skipping stone. Once it was up to a couple of Mach, it would build up shock waves on its nose--bow waves, I think they said--and tail waves, too, but they weren't too worried about that. Now comes the fun part. They would get up to a certain speed, and ....tiny surface mounted holes along the center beam of the thing... would spray very fine mist of fuel into the airflow. This is coming back to me now...[sketching]. At certain speeds, you can't use turbine engines. They're too slow; they start to be a hindrance [that's why we go to scramjets...]. WEll, ...they're using the shock wave as the outside nacelle (??) and the body as the inside nacelle. They put fuel into this area....enters a very high pressure area [seems wrong--should be an expansion? area] formed by this little wave here [shock off middle break] and ignites, cause it's high pressure and high heat. And that makes...the back end of the surface the engine. .....This shock wave holds it in. That was on...an explanatory thing. [diagram]

"They said, once you start doing this, it goes faster and faster and faster. Because the higher speed, the more compression, the more heat, and the better the fuel burns. FASter...faster. [So, like external body burning of some sort. What sort of speeds were they talking about?] Six, seven and eight. (laughs) Whew! They said, at that speed, they couldn't justify a human pilot. Because they needed so much in the craft for life support [yeah; environmental problems]. So, instead, they just went for total speed....like a remote control airplane. [so they were sending and receiving signals to/from it?] Yeah, it has its own brain in it....like an autopilot. Program autopilot to fly it.....[do you think it was totally autonomously controlled...interior...or did they actually send signals to/from it?] They sent signals to it to tell it what to do, yes, but it probably could fly itself. Then give order when to land, takeoff; if and when to use its weaponry. Pretty important stuff.

[Did you hear the term SWERVE mentioned?] No, should I have? [explained swerve program, signals to/from high Mach vehicle] ...There would be an area within this area [below shock] of turbulent flow that's going with the plane. So you could transfer signals through that, or you could go right up to the bow with an antenna....now, this part is all totally conjecture, cause I don't know about that [signals to/from it].

[Did they say anything about how it was used, or tested...?] Well, they were very cocky about the whole thing. 'This is why Gorbachev is at the table now, you know what I mean?' They were really proud of themselves. And...It looked real to me! And

they had a reason to be proud of themselves, because this thing was a very different way of conducting powered flight--where you're using a shock wave as the outside of an engine. That's a pretty spacy idea! [and they gave you some idea that there were several of these vehicles around?] Yeah; they had been flying them. They said they had one problem with one, and it had crashed. It had a problem over the Soviet Union, and it didn't come down until it was near Hawaii! So that's how fast it was going! And they said the Soviets have nothing that can knock it down; it's impervious to them. They <u>said that, within an hour and twenty minutes they could take out every city over a million in the Soviet Union.</u> And, boy were they proud of that! To me, it makes me a little sick, to tell you the truth. I've been to Sweden, Norway...it's beautiful country. I can hardly believe, stomach this monstrosity flying over that beautiful country. It's gorgeous there. And we're pretty damned cavalier to think we can take life and death into our own hands! One of these going to crash, know what I mean?!

[

Pt of Reel 8

"The other vehicles

NOTES: BRAD INTVW -- CONT.

...[got the feeling they're flying these armed, routinely now?] Yeah.
[how many out there; did they say?] No, but they said 'several'; I'd say maybe three, four--just a guess, though. [how long had it been flying--brad misunderstood question] Had been flying very recently, and this was a couple of yrs ago (1988). Lord knows what they're flying now. But they said, several times, 'you've witnessed the awesome power of the SR-71 today [note: SR had been flying as part of the Norton airshow--had been quite impressive show], and that was designed back in the 50s and 60s. What makes you think that we've been sitting around, not doing anything in this area? We're retiring it [SR-71] cause we have something much better that has lower operating costs, has much more capability and is not just for recon; it's national security oriented....etc.'

They were using every ....psychological button to push to get those people to think in a military, hawkish kind of way. They were trying to sell!! [what kind of response did the crowd give?] ....MMMMM...pretty mixed; they seemed kinda awestruck by what they saw, but you could see that a lot of the [invitees] had already been briefed on this stuff. Not too many questions; just sort of 'Oh well; he's asking ME for money; I'm not going to commit myself, OK?' Kinda the stern....'show me what you got; I'm not going to tell you anything. I'm not making any promises today, cause you'll hold me to em later.' It was a show and tell.

[anything else you can tell me about that vehicle?] It had movable front and rear surfaces...pivotable...leading and trailing edge flaps, sort of; not the type that would separate; looked like control surfaces to point the craft. It had NO tail surfaces; no fins whatsover. In fact, it was kind of a heavy-looking vehicle; diff. than most supersonic things, like an F-15 that has wafer-thin wings; they were after a completely different kind of flight here. [blunt edges?] Fairly blunt, mainly for the strength of the craft. Was obvious that was built like a Caterpillar truck [tractor?] than a ...it was tough! A big strong craft, not spindly like an F-104 wing. No, it was built to be pummeled and to take lots of heat.

It <u>smelled sort of like carbon</u>; I don't know how to put it, but...like a campfire. It looked used. You know...if you have an old solenoid that has had too much power put through it? It sort of smelled like it had an electrical failure or something. It just had been through a hell of a lot of...trouble. OK? [tiles damaged?] Scraped, discolored, kind of ....porous; ..... Well, I design boats, you see? We get cavitation on the propellers; this cavitation can cause sort of a pockmarked, rough surface [on the prop]. This thing looked like it had had major cavitation on it! [it had pockmarks on it?] It had a used, burned.....the nose of it was different than the tail; the tail was more burned and more abused. The nose looked like .....well, it was obvious that when you went back to the area

A guy in a suit standing by one of the guards.

where it had had fuel injected/burned at high temperatures and high pressures(?), course it's going to be different! It looked like it all started out as the same material, but it looked like this one could only fly...another year or two before they'd have to put new tiles on it.

...I can see how Mark could have drawn this from what I told him....[nucs--they actually ejected these things out the bottom and not the top, you're convinced?] They would not be accurate, coming out the top...[sandia explanation...]. Well, they [ports] are not left open; they're closed immediately. [do they eject ahead of the burning area?] Yes, ahead. [so it would just ring the forward area--fuel injection; where would you put em on this sketch?] [[Brad drew them in, with naca ducts, engines, etc.]] Engines, fuel, etc....back here; now, I have no idea if this [engine, fuel location] is true or not, but, if I was building this thing, that's where I'd put em.

[nuc area--you could definitely see a pattern in here, though?] Was just a pattern set up like a grid....was walking under it; you'd look up at it... wasn't a grid like an X; it was a grid like that--chevrons.
...we're out of time....[can we touch on the other one, the round one]

[showed him triangle sketches] -- That's more like the B-2 thing we saw. [looking at Mark's manned vehicle]--this is probably the farthest from what I saw, and no, I didn't see anything with an intake up above the windows like this. [that's a relief; never been able to figure out why it would be like that].....mark extrapolates a bit too much...[so, is this--the diamond--the most exotic thing you saw?]

NO! NO! NO! That's not the most exotic.....you've got a drawing, as accurate as I could get [the round, saucer-looking thing]. This dwg is so GD..accurate that I can't be much more specific than this. This was a really interesting craft--there were three of them. When I walked into the room....well, I thought of something stupid--like a nursery rhyme: daddy bear, mommy bear, baby bear. Like they'd been put in a Xerox machine--the same proportions, just diff. sizes. The small one was like 20 ft, the next 60 ft. diameter and the next one,...maybe 120 ft. diam. Just a guess; don't hold me to that. But the small one was really nice. Looked like a personal light-speed vehicle--it just boggles my mind to think about this, but .....

They looked poorly built, compared to the other ones. They had been built by scientists who didn't know a hell of a lot about laying up composite materials or whatever. The circular ....spherical container here was one of those pultruded balls, which is sort of a fiberglass ball wound with filaments so its real good at holding in pressure. Then the whole thing was just coated with thick, heavy lead paint. It was brushed on! [Streaks in it?] Yeah; it was just poorly built. If whoever built this actually hears this, I'll probably get punched...but you could tell it was made by scientists.

[what did they say about these?] Oh, I don't know if we've got time to get into all of it....was obviously the most interesting thing; I'm sorry I didn't spend more time on it, but...they were hovering! They were not connected to the [floor]. [end of tape 1, side b]

[tape 2,side a]
...and the neat thing about this one was that it didn't require it's own fuel source. They had found a new fuel source that was everywhere in the universe; it was a "wavelength" [frequency, he means???] that was on the order of 500 times the speed of light; it's invisible, we can't feel it... They said that everything in the universe is a vibration; light is just a "resisted vibration" of this other force--is a real fast vibration. ..... If you start with this force that's 500 times the speed of light, and you resist it down and you get gravity; resist down more and get magnetism; then resist down more and get light; resist down and get sound, heat....etc. and down to things we really recognize. Well, Einstein and others could only sense light; so thought ...that's the fastest thing in the universe. That's all we can clock....and they were dead wrong.

They compared this thing to a radio speaker; the circular rings here [around the mid-section of vehicle] were windings of an antenna; would around center at a certain length--many many miles--in order to bring in this extremely fast wavelength [note: think he's talking frequency here, not wavelength, but he continued to confuse the two; also, long antenna hardly consistent with detecting extremely hi freq, if that's really what he meant.] This column in the center of vehicle acted like a Tesla coil to step up the power....Tesla's been known to ..million times [high voltage?]; yes, very high. But this is NOT a voltage! Electricity is very low on the totem pole of resistance; elect. is below light. Well, when start with a very hi speed and you resist down, take 500 times, down to 210 times, instead of giving off electricity that you can use for a phone call, it gives off gravity. [I can see, intuitivel, what you're talking about...] The antenna brings in this power...and they said the power output of this was measured at a peak of <u>10 to the 26th power joules per cubic meter of space</u> -- empty space. Now, I remember that, because I COULD NOT BELIEVE IT! THAT'S A LOT OF JOULES! .....

[and that energy was what?] ...available everywhere in space. They said, 'think of like radio waves. You can't see them, you can't touch them, but around here, there are a hundred radio stations playing in your ear all the time. What you need to bring in that sound, to get that effect, is an antenna--that brings it in--an amplifier--that amplifies its effect--and a capacitor to store it up and... burst the energy, like a speaker. So, what we have is an antenna, an amplifier and a speaker.'

[amplifier being the center post?] The center post....which was enclosed by something like aluminum sheathing on the inside.

When it gets below the floor--guess you could call it the basement in this dwg.--it gets transferred out to plates, made up of pie-shaped metallic and nonmetallic....plates. This ball and cup control [in cockpit] controls how much power goes to each plate. If you move the cup over and put more power to one side than the other, it makes it list. It points it. It's very much like a helicopter....

If they wanted to go somewhere--and when I say somewhere, I don't mean Paris--if you wanted to go to the moon, say. You'd point the upper video camera to wherever you want it to go, then you'd put crosshairs on it. Then you'd move the rheostat [lever on right side of seat] up to add power....or allow power that's available...to flow thru this craft, it would, in effect, amplify what was on top of the plate and demphasize what was on the bottom of the plate. It would go where you wanted it to go. They said they had measured a max of 85g acceleration. ..... They said that the local area around [the vehicle] was not really affected that much by gravitational forces. [they bypassed inertia somehow?] Somehow; may have had to do with this ring here--the ring underneath the seats. There were places for the pilots' feet ...so they wouldn't touch this plate. They'd use this plate like a deck, but it didn't touch the sides of the ball [the f-glass dome]. There were tanks underneath that had oxygen in em for pilots' use.

One wierd thing: they didn't have any food and no longterm provisions in this thing. I didn't see a compass--didn't see anything in there. [they had it open?] Yeah; and they showed drawings, diagrams and video tapes of this thing. It doesn't fly very well--flies in an up-down, jerky, serrated type of motion, then boom! it's gone. It doesn't have normal aerodynamic principles involved. In fact, the thing looked like it weighed a ton, OK? I mean many, many.....maybe hundreds of tons. It had a hell of a lot of metal in it! Goldish, copperish metal. It just did not look like it was.....maybe elsewhere, so to speak. It looked like it was made in....you know, Compton! It looked like it was made in somebody's garage. Very few skills, whoever built this. They didn't have a lot of manufacturing backing; it looked like a real rough prototype.

[how many of these did they say were flying? Any idea?] They said we were looking at them. Three of them. And, you can take this how you want to--we all took it with a grain of salt....but....the guy said that with this group of craft that, uh....they'd been everywhere in the universe, and there's no life. They [invitees] asked a lot of questions, then, like 'how can you subject....how can you say that, whatever.' 'Just take it for granted, we've already tested this thing. The speeds on this are seven to eight times the speed of light, and we've been everywhere--and there's nothing out there. We better take care of the earth.' (laughs) It was very unnerving.

[where did they get these concepts then? They've been seeing this type of vehicle all over the world for years.] Well, they said they copied it. [from,...? And yet there's no life out

there?] They said the copied it. Now, they said no life in our solar system. [You said universe....] I made a mistake here; I meant solar system, not universe.....

Boy, I haven't told this to a lot of people. Cause, frankly, you know... my friends and colleagues have already taken unbelievable shots, you know. [we don't use names when....] It was...just a very neat thing to be in on this, you know? After the thing was over, they thanked us and said, 'I hope you'll think of us when you're voting, appropriating,....it was total sales. Then we all left. Then we were walking across the airfield and the airshow was sort of closing down, the sun's going down, and we looked at each other and said, "Good god, what did we just see??" [like twilight zone...] You look back at the building and,....there were people all over the place, but that one building had some guards around it. [Air Force guards or rent-a-cops?] Some of them had berets, some were.....they weren't rent-a-cops; they were American, ...[any rank on any of them?] I don't know, they just had M-16s.....[that's important---rank, uniforms.] They looked like privates; they didn't look like anybody who knew anything. Like they had been told 'you stand around that thing and make sure nobody goes in,' you know?

[anybody question you?] When we were going in, they recognized the guy I was with. [you didn't have to show them anything?] No; they said 'Who is this?' He said, 'This is Brad; he's my aide.' And they said....[did you get feeling that he had been to that bldg before?] No, but I got the feeling that the people checking us, he knew very well. They had sent him information(?) on this and he kinda knew what he was going to see. But, you know, he didn't plan to take me to this airshow. That was like a last minute thing. I was in his shop and we were doing an injection mold together, and, we're both pilots, just talking and I had heard about the airshow, and asked him if he was going. "Yeah, I'm going," then he kinda thought, 'OH, I'm not going to this airshow for the airshow,....then he said, "We can go to the show together, but I might have a few things to do," kinda evasive for awhile. So I said, "no, no. If you have something to do, I'll take my own car," so I met him there. And I don't think he was planning to take me over there, but we were just together, and it just worked out that way.

[who checked you? who questioned you..at building?] A guy in a suit, standing by one of the guards, outside by the door. From door, couldn't see anything...black cloth, on a pipe....couldn't see anything....Once we were in the door, we were late, so they were already making presentations. We just walked in the back ...[any big cars around the corner, like for Cranston...?] No, no, there were no cars around cause everybody walked to this place. [Cranston walked like everybody else?] You bet. He was dressed for golf...he was wearing glasses and, you know, he didn't want to be recognized; just one of the joes. [everybody drifted away afterwards, went own way?] Because of the airshow, they had certain places to park....there were thousands of people at this show! You have to walk down the long runways, by

these C-130s...or some kind of jets sitting there...and it was a hell of a long walk. That's a huge place!

[can you describe where this hangar was in relation to the runway..?] Oh god, it's just one of the huge hangars,....look, most of the hangars were wide open. They had vehicles in them, and people walking through them. It was just one of the hangars.....It was within about 500 yards(?) of another one that was open. It was like this hangar didn't have any displays or banners or airshow today...whatever. There were a couple of hangars by it....[sketching, showing rough location].....These were just quiet, nondescript, off the beaten path.

[which part of the base would you call it in? Northeast,..] Oh, god, I don't know. It was just one of the large hangars...[didn't catch a number on it ...?] No; don't know if I want to go out there and walk around again, but I probably could pick it out for you if you had a map. But it's ....they're not going to take it away! It was a big hangar, but it wasn't the biggest hangar. ...The biggest one had a C-5 in it.

[did you get the feeling that they had brought these vehicles in just for this show?] They said they had brought them in in the middle of the night--at 2 & 3 in the morning--over a period of a week. [fly them in, truck some in...?] They had to fly them in. They were too big to truck. [did they talk about anything... how these would sound inflight?] These things [indicating the circular ones]? They don't make any sound.

They made it cold in there [in the hangar, where Brad saw them]--they make a high ozone smell--like you're in the middle of a forest. Maybe one of their reactions with the air or something; percolating more oxygen as it sits there or something(?) But it was cold...kind of nice in there, like a botanical garden, where all the others were...sort of jet fuel..yech! This was kind of nice. So, that's that; I've covered most of it....

[last question: did they talk about what these vehicles had been reproduced from?] WEll, they tried to avoid it. They said something about 1947....they had some sort of a contact, telling them that we had no right using nuclear weapons, OK? That it disturbed more than we knew. Cease and desist. [and they were telling you all this at this briefing?] Because they asked a lot of questions, just like you did. "Well, where'd you get this thing? If it's a reproduction vehicle, where did it come from?" You know; that sort of thing. So, he answered, as well as he could, without saying a lot of.....well, he was really trying to not sound like a UFO...like a crazy person. Frnakly,.....he did a fairly good job of it. [was this a uniformed guy?] No, it was a suit; like a public relations guy. I've dealt with a lot of PR guys, and they're constantly thinking, "Well, how is this going to be construed? Always saying, and...uh, well,....uh--they're constantly thinking about each word, like it's the most importatn thing they've said in their life."

And all they really needed to do was give us the truth, and we would either take it or leave it. They just said that they had come across some hardware ...tried to make contact with these....The [others] didn't want to make contact; they just wanted to deliver the news and leave, OK? But, back in 1947, we had just won the war, we felt pretty damned cavalier and we... attacked, basically, OK? Rather than fighting back, they just tried to destroy their stuff and get away; and they didn't get all of it destroyed. That's what they said. Also said they couldn't really make those things that they found work. That they had to build their own...that this was built for our consumption, not theirs. Theirs was the wrong scale and the wrong,....you know, whatever. [so we just looked at theirs and built our own?] uh-huh. Based on what was seen. So it was not like a great R&D breakthrough; it was just copying something they had seen, to the best of their abilities.

By the way, the thing didn't look new; looked old. Lot of the pieces looked like pieces I'd seen in Gemini and Atlas Centaur. It was NOT high tech! Yet it was doing something unbelievably high tech. Like all really great inventions, they're simple. They're using a completely different energy source here. they're using an energy source that drives light; but it's not light. They're using a higher form of unresisted power.

[did they give any reason why they're not more of these, then?] Money (laughs); "we'd like to build a fleet of these; we need you to ...appropriate money... The Bush administration...we hope they are as good to defense as the Reagan admin. was; and we're so pleased about this build up during the Reagan term and we want to see that"....what did they say....Oh--"stay the course." They were PR people--it was a sales thing!

[and you never really knew who they were, who they belonged to, reported to, or anything?] I wasn't interested. I was interested in the vehicles; I'm a vehicle kind of guy, you understand? Politics just....uh...confuses me. [I'd just like to know who these people are..] They didn't introduce...in fact, if we'd gotten there on time...I missed the introductions. I didn't get there on time. [Because your host didn't get there on time.] He probably didn't know how large Norton AFB was! It's a big place! You can walk and walk and walk and only be halfway there. [so you guys just watched the show awhile, then drifted over there...] He said, "We can't watch the Thunderbirds." I said, "I want to! What are you talking about?"

So, there you have it. I have to go....[tape off]

...cont.---...they had sound on the tape, though. They had sound on the takeoff, and for takeoff, they had turbines. [Just sounds like a jet?] Sounds like a jet--like GE engines. Doesn't sound like ....[anything exotic]. But if this was flying and it was converting over from turbine to external shell thing, it probably wouldn't do it over a populated area, cause it would

have a supersonic cone behind it and you'd have supersonic booms happening. That's a real good way of tipping people off that you're up there. .... course, at high altitude...supersonic cones can only go so far down into the atmosphere [then it dissipates...]. Up around 30K or 40K ft. or higher, it could go as fast as it wanted to go. [shock just dissipates up there...] Yeah. Pulsing? No, they didn't mention that.

[on the video, did you see any contrails?] Oh yes, it had a hell of a contrail! [what'd it look like?] They showed a chase plane shot of it. Closed it's things [ducts] and then...phoom! And, no, the chase plane couldn't follow it. But it made a hell of a wake behind it; it was over water. [and a contrail?] It made a cylindrical wake (contrail??) Hope that helps...

[my own notes, after leaving meeting, while driving: Brad also said he's studing engr'g. courses now at Cal Tech --just to keep up. When I thanked him, he half-laughed and said, "It's OK; I'll send you a bill." He reminded me a couple of times that he gets $200/hr. as a designer. So, who knows--he may charge us. he also said if we wanted a good rendering of the base burning vehicle, he could provide that for a "couple thousand dollars."]

As of 12/10/90 — additional info from Brad's

- diamond-shaped A/C must slow to subsonic speeds to dispense weapons. — accuracy comments, they claimed no indic - that wpns were guided.