

ROCKET GIRL

A Stage Play By

GEORGE MORGAN

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CHARACTERS LIST

CARLEY MORGAN	20's, college student
BARBARA	Over 30, obit department manager
BILL WEBER	Early 20's, aerospace engineer
JOE FRIEDMAN	Late 20's, aerospace engineer
IRVING KANAREK	Early 30's, aerospace engineer
MARY SHERMAN	Late 20's, engineering Analyst
GENERAL HOWE	50's, 3-star Army general
MISS BIDDLE	General's secretary
COLONEL WILKINS	40's, Army colonel
MICHAEL SHERMAN	50's, Mary's father
BEATRICE MANNING	Any adult age, social worker
TOM MEYERS	40's, aerospace dept. manager
DON JENKINS	Early 20's, aerospace engineer
RICHARD MORGAN	Early 20's, aerospace engineer
MRS. WALKER	60's, retiring school teacher
DOCTOR	Any adult age, Mary's family physician
DUTCH KINDELBERGER	60's, owner of North American Aviation
PAUL MARSTERS	30's, an employee recruiter
FATHER MACKEY	50's, a Catholic priest
DAVID SHELBY	Any adult age, an enthusiastic reporter
RANGER	Any adult age, a Yellowstone Park ranger

The roles of Beatrice Manning and Mrs. Walker could be played by the same actor.

The roles of General Howe, Michael Sherman, Dutch Kindelberger, and Father Mackey could be performed by the same actor.

The roles of Colonel Wilkins, the Doctor, Paul Marsters and the Ranger could be performed by the same actor.

Other options: the roles of the doctor and ranger can be either sex, and so they could be performed by the same actor that plays Beatrice Manning and/or Mrs. Walker.

PROLOGUE

The sound of WIND - gentle at first, then it picks up.

LIGHTS FADE UP on a cemetery. A throng of mourners stands around a grave. Father Mackey - a Catholic priest - stands quietly in the middle. An old man places a rose on the grave.

The mourners leave - one at a time - during the following dialogue.

WIND FADES OUT.

LIGHTS FADE UP on the obit office of the LA Times. Barbara - head of the department - sits at a desk. Carley Morgan enters.

CARLEY

Excuse me - I'm looking for the obituary department.

BARBARA

May I help you?

CARLEY

Are you - Barbara?

BARBARA

Yes - what do you need?

CARLEY

My name is Carley Morgan - I sent you an obituary on my grandmother - Mary Sherman Morgan.

BARBARA

Oh yes - I remember.

CARLEY

I've been watching the paper, and I notice it still hasn't run.

BARBARA

I'm afraid we won't be able to print your your grandmother's obituary.

CARLEY

Why not?

BARBARA

Well, frankly Miss Morgan you make some wild claims in your piece - like that she was America's first female rocket scientist, that she invented the rocket

fuel that powered America's first satellite into orbit...

CARLEY

That's all true. What's the problem?

BARBARA

The problem is we can't independently verify any of it. There's nothing in the aerospace historical record that shows your grandmother ever existed - let alone that she accomplished anything.

CARLEY

Barbara - if my grandmother never existed, I wouldn't be here talking to you.

BARBARA

I'm sorry. Rules are rules.

CARLEY

This is absurd! You printed a half page obituary on that guy who invented the Oscar Meyer weenie whistle!

BARBARA

Of course - we were able to independently verify it.

CARLEY

What about all the people who accomplish great things every day, but who aren't in some historical record - are they just supposed to vanish into obscurity?

BARBARA

I think you're beginning to understand.

CARLEY

Understand? I'll tell you what I understand: In the 1950's my grandmother single-handedly saved America's space program, and nobody knows about it but a handful of old men. Here's what I'm gonna do: I'm going to find those men - I'm going to track them down, and I'm going to interview them. I'll get sworn affidavits, and you'll have your verification.

She turns and stomps out of the office.

LIGHTS FADE TO BLACK.

LIGHTS UP. Five men and one woman enter from various directions. There is an almost ethereal element to their entrance. They walk to stage front and face the audience.

BILL

My name is Bill Webber. I am an engineer.

JOE

My name is Joe Friedman. I am an engineer.

IRVING

(holding a pipe)

My name is Irving Kanarek. I am an engineer.

DON

My name is Don Jenkins. I am an engineer.

TOM

My name is Tom Myers. I am an engineer.

MARY

My name is Mary Sherman. I am an analyst.

BILL

Every morning and afternoon...

JOE

...we design the biggest and best rocket engines in the world.

IRVING

But at lunch time...

MARY

...we play bridge.

Mary, Joe, Bill, and Don sit at a card table and pick up their already-dealt cards. Irving and Tom stand over to kibitz.

IRVING

Play the club.

LIGHTS FADE TO BLACK

SCENE 1.

LIGHTS UP on the office of Milton Howe - three star Army general. The general - in uniform - is ensconced at his desk amidst a pile of paperwork. He wears reading glasses.

There is a bucket of ice on his desk with several glass bottles of Coke. An open bottle is in his hand. It's a hot day - he takes a sip.

There is a knock at a door.

GENERAL HOWE

Come.

Miss Biddle - a secretary - enters.

MISS BIDDLE

Colonel Wilkins is here, sir.

GENERAL HOWE

Send him in. And Miss Biddle - I'd like you to stick around for this.

She stands in place as Colonel Wilkins enters.

COLONEL WILKINS

You needed to see me, sir?

The general pulls a Coke from the bucket.

GENERAL HOWE

Coke?

COLONEL WILKINS

No thank you, sir.

The General puts the soda back.

GENERAL HOWE

Colonel Wilkins; what do you know about women?

COLONEL WILKENS

I know them when I see them, sir.

GENERAL HOWE

Good answer.
Here's one thing I know: there's no such thing as being sort-of pregnant. You're either pregnant, or you're not pregnant - there is no in between.

COLONEL WILKINS

Yes sir - that's always been my understanding.

GENERAL HOWE

Now - how much do you know about rockets?

COLONEL WILKINS

I know they usually blow up.

MISS BIDDLE

Not Army rockets.

GENERAL HOWE

Not Army rockets.

COLONEL WILKINS

No sir - not Army rockets.

GENERAL HOWE

Colonel - have a Coke.

General Howe hands Colonel Wilkins a Coke. This time he takes it.

GENERAL HOWE

Now Colonel - what do you know about Coke?

He is unsure what to say. Miss Biddle helps him out.

MISS BIDDLE

It's the pause that refreshes.

COLONEL WILKINS

It's the pause that refreshes.

GENERAL HOWE

Good answer.
Now, rockets are like a couple of Coke bottles.

COLONEL WILKINS

In what manner, sir?

General Howe grabs another Coke bottle and holds it above the one he has been drinking.

GENERAL HOWE

Two propellant tanks - one stacked on top of the other. In one is the oxidizer - in the other is the fuel.

MISS BIDDLE
You're losing him, sir.

The General sets the bottles down.

GENERAL HOWE
Do you own a car, Colonel?

COLONEL WILKINS
Yes sir - a fifty-seven Pontiac.

GENERAL HOWE
Did you buy it with the big engine?

COLONEL WILKINS
Of course - I'm an American; I always purchase as much power as I can afford.

GENERAL HOWE
Good. Now - think of your car: it runs on two chemicals - a fuel and an oxidizer. The fuel..?

COLONEL WILKINS
Gasoline.

MISS BIDDLE
He's brilliant, sir.

GENERAL HOWE
And the oxidizer..?

Colonel Wilkins has to think about this one.

COLONEL WILKINS
The...air. The air that goes into the carburetor.

MISS BIDDLE
It's the oxygen in the air that reacts with the gasoline.

COLONEL WILKINS
Sir - does she have to be here?

GENERAL HOWE
Shut up and listen - you might learn something!
The oxidizer helps the fuel burn, and in the right proportion it helps the fuel burn hotter, so you get more energy. Fuels and oxidizers, Colonel. Fuels and oxidizers.

If the American people knew how much of their lives were governed by fuels and oxidizers, they might crack open a book and study once in a while. Ya know what I mean?

COLONEL WILKINS

Yes sir.

GENERAL HOWE

Now - a rocket is exactly the same as your car. It burns a fuel...

(points to one bottle)

...and an oxidizer.

(points to second bottle)

Understand?

COLONEL WILKINS

Yes sir.

The General takes another sip of his Coke.

GENERAL HOWE

Have you read the intelligence report we just received from Washington?

COLONEL WILKINS

The one about the Russian space program? Yes sir - I've read it.

GENERAL HOWE

Then you know the Russians are one tit suck away from putting the world's first satellite into orbit. Do you know what that means, Colonel?

COLONEL WILKINS

Not exactly, sir.

GENERAL HOWE

It means America's space program is years behind the Russians. It's embarrassing! It's worse than embarrassing; it's...it's...

MISS BIDDLE

Humiliating.

GENERAL HOWE

Humiliating!
Our boys out at Huntsville - Doctor Von Braun's group - could have had a satellite

in orbit months ago. Do you know why they haven't?

COLONEL WILKINS

I assume it has something to do with politics.

GENERAL HOWE

Of course it has something to do with politics! Everything involving failure has politics at its foundation!

MISS BIDDLE

The President keeps funneling our budget to the Navy program.

GENERAL HOWE

Exactly. Damn swabbies. The Vanguard - and those keep blowing up. Now the mucky-mucks in Washington have finally gotten their heads out of their asses and realize they need the Army to come to their rescue.

MISS BIDDLE

Go Army!

GENERAL HOWE

Now the government's asking us - hell, they're begging us - to get Von Braun's Redstone rocket prepped and ready for an orbital mission A-SAP.

COLONEL WILKINS

Amazing how public pressure helps elected officials think more clearly.

GENERAL HOWE

Isn't it?
I got a call from Doctor Von Braun himself this morning.

COLONEL WILKINS

Really. That must have been interesting.

GENERAL HOWE

It was.
He says his engineers have calculated that the Redstone, as currently configured, has what it takes to get 95% of the way into orbit. Do you know what 95% gets you in the satellite business?

COLONEL WILKINS

No sir.

MISS BIDDLE

It gets you bupkis.

GENERAL HOWE

It gets you bupkis!

(demonstrates with Coke
bottle)

The rocket will keel over at a very high altitude and nose dive into the ocean - another embarrassing, humiliating failure for the U.S. of A.

COLONEL WILKINS

Yes sir.

GENERAL HOWE

Sometime in the near future Americans are going to open their morning newspaper and read a story about the Russians putting a satellite into orbit. You know what Mr. and Mrs. John Q. America are going to find out on that fateful morning, Colonel?

COLONEL WILKINS

No Sir.

GENERAL HOWE

They're going to find out that America's space program is "sort-of pregnant!" Do you believe it's possible to be sort-of-pregnant, Colonel?

Miss Biddle hands a folder to the Colonel.

MISS BIDDLE

Trust me - the answer is "no."

GENERAL HOWE

I'm sending you out to California - a little backwater they call Canoga Park. There's a company - North American Aviation - got some of the best engineers in the business.

MISS BIDDLE

Not as good as the Army.

GENERAL HOWE

Not as good as the Army.
We're giving them the contract. Their charge is this: To come up with a new propellant combination that we can use in the Redstone to get that extra five per cent of performance, without changing one nut or bolt in the rocket's design. And we need it two days before yesterday.

COLONEL WILKINS

Yes sir.

GENERAL HOWE

Dismissed.

An exchange of salutes. Miss Biddle and the Colonel move to exit.

GENERAL HOWE

Colonel.

The Colonel turns around as Miss Biddle exits.

GENERAL HOWE

Tell those white shirts at North American I want them to put their best man in charge of this project. Whoever they choose doesn't know it yet, but he's about to become the most important person in America.

COLONEL WILKINS

Yes sir.

Colonel Wilkins exits. General Howe adjusts his reading glasses, goes back to work - and takes a sip from his Coke.

LIGHTS FADE TO BLACK.

END SCENE 1.

SCENE 2.

In complete darkness a male voice - devoid of emotion - is heard over a loudspeaker.

LOUDSPEAKER VOICE

LOX tank vent valve closed. Alcohol vent valve closed.

(two beats)

LOX tank pressure up. Alcohol tank pressure up.

(two beats)

Turbo pump lube pump on. Turbo pump vent chamber open.

(more beats)

Main LOX valve closed. Main fuel valve closed. Ninety seconds to ignition.

LIGHTS SLOWLY UP inside the control blockhouse of rocket test stand #2 - Santa Susana Test Site - the hills above Simi Valley, California.

A cheap desk - and not much else. Two men in their twenties - Bill Webber and Irving Kanarek - face the audience with binoculars glued to their eyes.

They wear white dress shirts, skinny dark ties and dark slacks. I.D. badges are clipped to their breast pockets. Crew cuts are the only choice on the menu. These are the nerds that roamed the Earth before the word was invented. Their clothes are slightly rumpled: behold the world prior to "Wash and Wear."

LOUDSPEAKER VOICE

LOX and fuel tank regulators set to fifteen PSI.

(couple beats)

Fire Ex system pressurized. Fire Ex main valve closed. Fire Ex pump on.

IRVING

Mary - you ought to come and see this; they're about to fire up the Navaho.

No response.

BILL

Are you coming or not?

LOUDSPEAKER VOICE

Peroxide regulator set to 450 PSI. Sixty seconds to ignition.

IRVING

Mary - you really ought to see this.

BILL

Hey - there's somebody laying on the ground next to the test stand.

IRVING

Looks like George Toumey.

Mary Sherman - wearing a cheap skirt and blouse straight out of a Sears catalog circa 1950 - enters running - grabs a third pair of binoculars off the desk - and glues them to her eyes.

BILL

That boy's in for a helluva wake-up call.

Mary goes to a rotary phone and dials a single digit number.

LOUDSPEAKER VOICE

Open fuel tank pressurizing valve. Open
LOX pressurizing valve.
Forty seconds.

As Mary talks to the technician, Don Jenkins enters. He grabs a pair of binoculars from one of the other two men.

MARY

This is Mary Sherman in blockhouse two.
We need some technicians out at the test
stand. Tell 'em their buddy George
Toumey's been sampling the alcohol again.

BILL

Drunk as a skunk.

MARY

(still on phone)

I warned him if he did this again we
wouldn't stop the test. Now get him
outta there!!

She hangs up the phone and steps to stage front - putting binoculars to eyes.

IRVING

Look at those techies run.

Joe Friedman enters and joins the crowd. He has a pair of binoculars and raises them to watch.

MARY

Pack of Winstons says they get knocked on
their butts.

BILL

All I got are Kents.

LOUDSPEAKER VOICE
Igniter on. Twenty seconds.

IRVING
This is the moment the techies wish
George had stayed on his diet.

BILL
Drag him - don't carry him!

IRVING
That's the way.

BILL
Oops!

IRVING
Lost a shoe.

MARY
They're still too close.

BILL
Here we go...

IRVING
A four thousand degree ass kick!

LOUDSPEAKER VOICE
Ten seconds...

BILL
Superman should be swooping down
any second...

LOUDSPEAKER VOICE
Five...four...three...two...ignition start.

A beat - then BRIGHT FLICKERING ORANGE LIGHTS flood the players as they watch through binoculars. This is a static test of an engine - not a rocket launch - so the binoculars never move.

A beat - then the SOUND (which travels slower) reaches the blockhouse with a continuous ear-splitting roar.

Everything in the blockhouse vibrates. Objects fall off of whatever they're sitting on. It's like the epicenter of an 8.0 earthquake.

The roar goes on and on. It is so loud there is a warning printed in the play program for the benefit of older audience members who must re-adjust their hearing aids.

After about thirty seconds -

ORANGE LIGHTS CUT OFF. ROCKET SOUND EFFECT CUTS OFF.

LOUDSPEAKER VOICE

Engine cutoff.

The male engineers lower their binoculars, then start to laugh, and their laughter builds as they exit.

BILL

That was great!

Now alone - Mary slowly lowers her binoculars. For a moment she is in her own world.

MARY

Drunks.

As LIGHTS FADE TO BLACK - a LOUD KNOCKING begins. A few beats - then the knocking is heard again.

END SCENE 2.

SCENE 3.

LIGHTS UP in the North Dakota farmhouse of Michael Sherman - eighteen years earlier.

Mr. Sherman sits collapsed in a chair. Empty wine bottles lie here and there.

The loud knocking begins to wake him up and Michael stirs. The knocking continues - more insistent this time.

MICHAEL

Uhh - go away.

More knocking.

BEATRICE

(off stage)

Mister Sherman!? Mister Sherman - can you hear me!?

Michael stirs some more. Again from off stage -

BEATRICE

Mister Sherman - it's Beatrice Manning from Social Services.

MICHAEL

I said go away.

His unpainted front door opens - creaking on its never-oiled hinges - and Beatrice Manning enters.

BEATRICE

Mister Sherman - I've been knocking on your door for five minutes.

MICHAEL

Why didn't you just assume I wasn't home?

BEATRICE

Because, sir, I could see you through your front window.

MICHAEL

Oh.

BEATRICE

Mrs. Walker tells me your daughter Mary still is not attending school.

MICHAEL

So what.

BEATRICE

Mary is nine years old - she is three years behind. Contrary to our agreement you still have not registered her for class.

MICHAEL

I need her here. Somebody has to clean the creamer.

He starts to look for a wine bottle that isn't yet empty.

BEATRICE

Mister Sherman - by not allowing your daughter to go to school you are in violation of the law.

MICHAEL

This is a farm. We have chores.

BEATRICE

I told you last week that you were being given your final warning.

Michael's disdain of the government's interference with his life for the last twenty years sobers him up slightly.

MICHAEL

You government people wanna control everybody's lives! You made all my kids go to school - my sons, my daughter Elaine - everybody. They're all gone. There's no one left to work the farm but Mary. Do you paper pushers have any idea how much work it takes to operate a farm!? I never went to school - I turned out just fine. You're always telling me how to run my life, run my family. Let me tell you somethin' - this is my family - my house - my farm - my property! I make the decisions here!

BEATRICE

The sheriff is waiting outside, Mister Sherman.

MICHAEL

The river - what about the river? How's she gonna get across?

BEATRICE

We've already been over this. The State of North Dakota will provide a horse she can ride each morning across the river to school.

MICHAEL

(despondent)

I need her. I just can't seem to get any work done by myself anymore.

BEATRICE

I brought the registration forms with me.

She hands him several papers and a pen.

BEATRICE

If you do not enroll her today you will be arrested.

He roughly signs the papers and shoves them back at her.

BEATRICE

I'll have the horse sent over this afternoon. We will expect to see Mary in class tomorrow morning, eight o'clock sharp.

She goes to the front door and opens it.

MICHAEL

Now who's gonna clean the creamer!?

BEATRICE

Sir - why don't you give it a try.

Beatrice exits.

LIGHTS FADE TO BLACK

END SCENE 3.

SCENE 4.

LIGHTS UP on the Office of Research and Development of North American Aviation. A half dozen desks and chairs.

Lunch time. The engineers are in the middle of a bridge game.

DON

I hear we're getting a visitor from White Sands.

BILL

Some new contract supposedly.

MARY

I hope it's a new engine - we could really use the extra work.

JOE

Could be. The Navaho Project's winding down.

IRVING

White Sands. That means they'll be sending a government goon.

BILL

Those "government goons" pay your salary, Kanarek.

Don notices off stage someone approaching.

DON

Uh - ex-nay on the government-say.

Colonel Wilkins enters, carrying a thick binder.

COLONEL WILKINS

I'm looking for the Engineering Department of the Office of Research and Development.

BILL

You found it.

COLONEL WILKINS

I found it. This is the engineering department.

JOE

This is it.

COLONEL WILKINS

Could I ask what on earth you're doing?

IRVING

Playing bridge.

MARY

So what kind of a contract are you bringing us?

COLONEL WILKINS

My mission here is top secret.

DON

Could you answer a question for us? What is the actual difference between secret and top secret?

JOE

Yeah - how much more secret than secret is top secret?

IRVING

If something is top secret, can it really be any more secret than just regular secret?

BILL

How exactly do you measure degrees of secrecy?

IRVING

Are there units - like meters, nano-seconds,
gighertz of secrecy?

COLONEL WILKINS

I have an appointment with Mister Tom Meyers.

BILL

Right through that door.

The Colonel heads toward Tom's office door.

Mary shakes her head, smiling.

MARY

Gigahertz of secrecy. You guys are bad.

The engineers chuckle.

The Colonel has returned. He looks at one of the engineers and
points to Mary.

COLONEL WILKINS

Oh and uh - have that secretary bring
me a cup of coffee.

He turns and moves toward Tom's office door.

MARY

If you ask me to get coffee you'll be
taking your meals through a tube.

The Colonel enters the office of Tom Meyers - manager of Research
and Development at North American Aviation. Charts, graphs and
aerospace photos line the walls. A golf bag with clubs sits in a
corner.

COLONEL WILKINS

I'm looking for Tom Meyers.

TOM

Colonel Wilkins?

They shake hands.

COLONEL WILKINS

I met a few of your engineers coming in
here. They're all playing bridge.

TOM

It's lunch time.

COLONEL WILKINS
(checks his watch)

So it is.

TOM

You mentioned on the phone the Army wanted to discuss a new contract.

COLONEL WILKINS

Yes. As you know, the Redstone rocket program has been a terrific success.

TOM

Of course. We built the booster.

COLONEL WILKINS

Which is why I'm here. The Army's been given the green light to adapt the Redstone for an orbital flight.

TOM

Well it's about time. Frankly everyone around here is tired of being on a leash. What can we do to help?

The Colonel removes a file from his binder and hands it to Tom.

COLONEL WILKINS

We need to increase the Redstone's performance by at least five per cent - without changing any of the hardware.

TOM

In other words, the only things we can change are the propellants.

COLONEL WILKINS

Exactly. And we need it three days before yesterday.

TOM

Von Braun's people couldn't solve this?

COLONEL WILKINS

Unfortunately, no.

(opens the binder)

I've been going over North American's list of engineers and I notice Irving Kanarek works here. As the inventor of Red Fuming Nitric Acid - a propellant we've had great success with on the Nike - Kanarek has a blue ribbon reputation with the Army. He

seems to be the most qualified candidate.
I'd like you to put him in charge of this.

TOM

Well, Irving's a good engineer, but
theoretical performance calculations
are not his specialty.

COLONEL WILKINS

You've got nine hundred engineers on your
payroll. I've read the background bio on
every one of them. I believe Kanarek's our
boy.

TOM

I disagree.

COLONEL WILKINS

Well who would you choose?

TOM

When you're talking about theoretical
performance calculations there's only
one choice around this place: Mary
Sherman.

COLONEL WILKINS

Mary. As in M-A-R-Y Mary?

TOM

That's right.

COLONEL WILKINS

You have a female engineer?

TOM

Actually, she's an analyst.

COLONEL WILKINS

An analyst.

The Colonel pages through the bios.

COLONEL WILKINS

I don't have her in my book.

TOM

She's probably in the miscellaneous
section.

The colonel finds Mary's bio in the back of the binder.

COLONEL WILKINS

Ah - Mary Sherman.

He quickly reads her short bio.

COLONEL WILKINS

According to this, Miss Sherman attended DeSalles College in Ohio for one year, then dropped out to work in a weapons plant before being hired here. No doctorate - no masters; not even a bachelors degree. No noteworthy successes or accomplishments - no published papers. Looks like the only thing we can say about her is she has a high school diploma from Ray, North Dakota - wherever that is.

TOM

All of that's true, however...

COLONEL WILKINS

I'm sure you know a lot more about rocket science and technology than I do, but General Howe told me to make sure you put your best man on this project!

The Colonel turns pages in the bios.

COLONEL WILKINS

Now, Mister Kanarek on the other hand...

Tom opens his door and steps out onto the engineering floor.

TOM

Hey Bill - ya got a minute?

BILL

Sure.

The two men enter the office.

TOM

I want you to meet Bill Weber - one of my best engineers.

Bill and the Colonel shake hands.

Mary waves Joe over to take Bill's place at the card table.

MARY

Joe.

As Joe sits at the card table -

TOM

Bill - the Colonel here needs the very best theoretical performance person we've got for a special project. Who would you recommend?

BILL

Theoretical performance? I'd recommend Mary.

COLONEL WILKINS

But Irving Kanarek has a much better...

BILL

Kanarek!? Oh please. Irving couldn't calc his way out of a toaster.

Again Tom steps out and addresses Don.

TOM

Don! Can I see you?

Don leaves the card table and enters Tom's office.

MARY

I'll play both hands.

TOM

A specialist for a project involving theoretical performance calculations. Who would you choose?

DON

Hmm. I guess...probably Mary.

COLONEL WILKINS

Are you familiar with Irving Kan...

TOM

(calling from doorway)

Irving!

Irving stands up.

IRVING

Sounds like the military-industrial complex is calling.

Irving enters Tom's office.

Mary and Joe now each play two hands.

TOM

Colonel - meet Irving Kanarek.
Irving - the Colonel needs the very best
theoretical performance person we've
got for a special project. Who would
you recommend?

IRVING

I could do that.

BILL

Irving - get real...

IRVING

I could!

Bill shakes his head and rolls his eyes.

IRVING

Hey - I invented Red Fuming Nitric Acid -
remember?

BILL

(super mockery)

I invented Red-Fuming Nitric Acid. I
invented Red-Fuming Nitric Acid. I'm such
a pretty boy!

TOM

Bill...

BILL

You know perfectly well theoretical
performance is Mary's department.

COLONEL WILKINS

Perhaps North American isn't the right
company for this job.

The engineers realize they are close to losing a contract.
They go to the door and shout -

ENGINEERS

Mary!

MARY

Let's see what the boy's club is up to.

Mary leaves Joe alone at the card table and enters Tom's office.

TOM

Von Braun needs a new propellant combination to boost performance on the Redstone. Any idea who I should give that to?

MARY

Well, you would need somebody with experience doing theoretical performance calculations.
I'm sure Irving could handle that.

COLONEL WILKINS

There. Someone's finally making sense.

TOM

Colonel - meet Mary Sherman. Mary - Irving thanks you for your humble brown-nosing. Now honestly - who would you really pick?

MARY

Oh - you want honesty. Well in that case I guess I'd say if you gave that project to anyone but me I'd kick your ass.

An embarrassing beat -

BILL

That was honest.

TOM

Why don't you all go back to work.

The engineers exit the office.

DON

(to Mary)

You do know that guy's your boss.

Lunch time is over. They put away the card table and go back to work.

The Colonel just won't let it go.

COLONEL WILKINS

A high school diploma! A high school diploma, for godsakes!
Nine hundred engineers - all male - all with college degrees - and you're telling me the person best qualified to do this job is not just the only woman engineer in the

company, but also the only engineer without a college degree!? That's what you're telling me?

TOM

She's not an engineer, she's...

COLONEL WILKINS

...an analyst - yes, you said.
She has no resume'. No track record.
She's never accomplished anything noteworthy!

TOM

Colonel; no one accomplishes anything noteworthy - until they do it for the first time.

LIGHTS FADE TO BLACK.

END SCENE 4.

SCENE 5.

SPOT ON an empty part of the stage.

MRS. WALKER

(out of light)

Mary? Where are you?

A beat or two.

MRS. WALKER

(out of light)

Mary - your family and friends are here.

MRS. WALKER - an elderly school teacher - enters the spot.

MRS. WALKER

Mary? Are you out here?

MARY

(out of light)

I'm here.

Mrs. Walker takes several steps - and the spot follows her. She and the follow spot find Mary - sitting in a chair and wearing a graduation cap and gown.

MRS. WALKER

This is your graduation party. You should be inside.

MARY

I wanted to watch the stars.

Mrs. Walker looks up for a moment - but doesn't see the priority.

MRS. WALKER

Well yes - they're nice.
My, you've been thoughtful lately.

MARY

I've been thinking about my future.

MRS. WALKER

Mary - a girl as smart as you has her future already set; you'll be married, have children, and - now that I'm retiring - take over as Ray's new school teacher.

MARY

Married? Maybe. Children? Doubtful.
I want to be around people of intellect.
That leaves out children - and it certainly leaves out Ray.

MRS. WALKER

What are you saying?

MARY

There are plenty of others out there who would make great school teachers.

MRS. WALKER

I submitted your name to the Board. They already approved it.

MARY

You should have discussed that with me.

MRS. WALKER

Everyone in Ray has always assumed you would be our next teacher.

MARY

They assumed wrong. I'm leaving Ray, and I'm leaving North Dakota.

MRS. WALKER

We're not good enough for you?

MARY

Sure you are.

But we sense she is lying to be polite.

MRS. WALKER

Who's going to take my place?

MARY

It won't be me - I have other plans.

MRS. WALKER

Other plans? You've never mentioned anything about other plans.

MARY

I'm leaving tonight. This will be our last chance to say good-bye.

They briefly hug.

MRS. WALKER

Do your parents know about this?

MARY

They will in the morning.

MRS. WALKER

Where will you be going?

MARY

I've enrolled in DeSalles College - in Ohio.

MRS. WALKER

I've never heard of it.

MARY

It's not the greatest college in the world, but it's all I can afford. Their science program looks pretty good; I've decided to become a chemist.

MRS. WALKER

A chemist! Mary - girls don't become chemists or scientists. That's a man's career.

MARY

Don't you think I can do it?

MRS. WALKER

Just because we can do something doesn't mean we should.

MARY

Well you see, that's where we differ.

As she walks away -

LIGHTS FADE TO BLACK

END SCENE 5.

SCENE 6.

LIGHTS UP on the Office of Research and Development.

Irving is at his desk - alone. Joe Friedman enters carrying a rolled set of blueprints and goes to his desk. He opens the blueprints.

A beat or two - then Don Jenkins enters with a small vase of flowers and places them on Mary's desk.

DON

Hey Joe - how's that camera thing coming along?

JOE

It's called a "lens," Jenkins.

IRVING

Better not let Tom see you're working on it on company time.

JOE

I'm not doing it on company time.
(a beat or two)
Maybe once in a while.

DON

Joe, here, is gonna be a rich inventor some day. Isn't that right, Joe.

Bill enters with a cup of coffee and goes to his desk.

BILL

Tom alert.

JOE
(rolling up blueprints)
Jenkins - you wouldn't know a great
invention if it flew up your ass.

Don has gotten Joe's goat. He and Irving chuckle over it.

BILL
By the way - I hear Tom's hired a new
heat transfer specialist.

DON
Heat transfer? Am I being replaced?
I'm being replaced, aren't I?

Tom Myers enters with the new recruit - Richard Morgan. He is holding a brown cardboard box filled with his personal belongings. He is dressed like the other men - same crew cut hair - but this hair is bright red.

TOM
Everybody - as you know we've been looking
to hire someone to handle the heat transfer
problems on the Navaho. Fresh out of
Caltech - I'd like to introduce Richard
Morgan. Joe, he'll be working with your
group.

JOE
We can use you.

DON
I can do heat transfer.

TOM
That's great, Don.

Tom puts a cheap-looking name plate on a desk.

TOM
This will be your desk. Any questions?

RICHARD
Just one. I had to get a top-secret
clearance to work here. What do I tell
people when they ask me what I do?

TOM
Boys and girls - what do we say?

THE ENGINEERS

A little of this - a little of that.

TOM

Good luck.

Tom leaves. Richard gets comfortable at his new desk.

Mary enters from her break holding a mug of coffee. She notices the vase of flowers and moves them to a corner of the desk.

MARY

Thank you, Don.

(notices Richard)

Do we have a New Guy?

(checks his name plate)

Richard Morgan.

DON

So what's your story, New Guy?

BILL

Yeah - who are you and why should we care?

MARY

What they mean is - what noteworthy accomplishments do you have that would make us kneel down and worship at your feet?

RICHARD

Well - I played college football in the Rose Bowl.

DON, JOE, IRVING, BILL

WHOA!!

The men jump up from their desks, kneel down, and bow once or twice - as they chant.

MARY

Get up - you're embarrassing!

(they comply)

You. You played college football in the Rose Bowl.

RICHARD

More than once.

MARY

More than once.

Pack 'o Winstons says New Guy has never even seen the inside of the Rose Bowl.

BILL
All I got are Kents.

MARY
Prove it.

RICHARD
Well - you could call my old coach;
Burt Labrucherie.

MARY
Don't tell me - he's out of the
country on vacation - or he's dying.

RICHARD
He's retired. You could probably
reach him at home.

Mary picks up the phone receiver on her desk.

MARY
I need an outside line.
(to Richard)
What's the number?

RICHARD
Dickens five eight seven four two.

MARY
Dickens five eight seven four two.
(a beat or two)
Hello - May I speak to Burt Labrucherie?
...Burt? - this is Katherine Hepburn. I'm
doing an employment background check on a
Richard Morgan - do you know him?
(a beat)
He put on his resume that he's played
college football in the Rose Bowl...
(a beat or two)
Is that right...Is that so...really..
that's interesting, I never knew that.
Okay, sir - thank you very much.

She hangs up.

MARY
Oooooookaaaay. How many of you chuckleheads
knew that New Guy went to Caltech?

They all raise their hands.

BILL
Tom told us.

MARY

And how many of you knew that Caltech
plays all of its home games in the Rose
Bowl?

They all raise their hands again.

JOE

It's common knowledge.

Mary nods - understanding she has been snookered.

MARY

So, New Guy thinks he's clever.

RICHARD

New Guy is clever.

MARY

Richard. I guess that means I'll be
calling you...Dick.

The men have a chuckle over this.

RICHARD

So what about you. Any noteworthy
accomplishments?

MARY

Quite a few as a matter of fact.

RICHARD

Like?

MARY

I was...my high school's Valedictorian.
Class of '41.

RICHARD

You - a Valedictorian? I don't believe
it.

MARY

Gonna cost you to find out.

RICHARD

I don't smoke.

DON

We accept cash in lieu.

RICHARD

Okay. I got fifty cents says you weren't even in the top ten of your class.

MARY

Pick up the phone. We're going to call Ray County School, Ray County, North Dakota.

He picks up his desk phone but is unsure what to do.

MARY

Dial nine.

A rotary phone - he dials a nine. He wonders what to do next.

MARY

Wait for the impatient lady.

RICHARD

(a beat)

Oh, Hi. I, uh...yes...uh...

MARY

You need an outside line.

RICHARD

I need an outside line...Thank you.

MARY

Area code seven zero one. Bismark three four six seven two.

RICHARD

Area code seven zero one. Bismark three four six...

MARY

Seven two.

RICHARD

Seven two...

Yes, this is Humphrey Bogart - I'm doing an employment background check on one of your former students - Mary Sherman. ...Class of '41 - that's right. Miss Sherman claims on her application that she was your school's valedictorian... Uh-huh...Is that so?...I see...That's very interesting...Thank you.

(Bogey:)

And here's lookin' at you, sweetheart.

He hangs up.

BILL

You owe us each four bits.

RICHARD

Hey - I haven't told you the answer yet!

IRVING

We already know the answer.

RICHARD

(to Mary)

Ray County School only has eighteen students...in twelve grades. In 1941 you were the only graduating senior, so you were...

BILL, DON, IRVING, JOE

...the class Valedictorian.

DON

Don't feel bad - we all fell for that when we first started working here.

Her dignity restored, Mary goes back to work.

With Tom gone, Joe has gone back to his blueprints. Something about the blueprints catches Richard's eye. He steps closer.

RICHARD

Is that a tri-focal lens?

Joe reacts like he has received an electric shock - quickly rolling up his blueprints.

JOE

NO! No it's not!

RICHARD

Yes it is - I recognize the...

JOE

It's a two-speed reciprocal inverse reaction formulator! It has nothing to do with cameras or zoom lenses. What's your interest in zoom lenses, anyway!? Why do you keep talking about zoom lenses!?

RICHARD

A zoom lens.

JOE

Who are you!? What do you want!? Who are you working for!?

RICHARD

North American Aviation - I thought.

JOE

A new guy suddenly appears out of nowhere and he just happens to be curious about my design?

RICHARD

Look, I'm sorry.

DON

Aren't we supposed to be designing rocket engines?

IRVING

Maybe it's a new product line.

Don and Irving have their chuckle.

Richard returns to his desk, but Joe keeps a wary eye on him. Richard starts removing items from his cardboard box. One of them is a Nikon camera. Joe notices it immediately - and we can see the lust in his eyes.

He swallows hard.

JOE

Is - is that the new Nikon SP Rangefinder?

RICHARD

Sure is.

JOE

How did you get it!? They're not supposed to be available for another three months.

RICHARD

After graduation I spent a couple of weeks in Japan. Picked this baby up at a store in Okinawa.

Oh the camera-lust.

JOE

Does it have the new titanium shutter curtains?

RICHARD

Yyyep.

JOE

With motordrive?

RICHARD

Of course.

JOE

A brightline illuminator? Single non-rotating speed dial? Six built-in framelines?

RICHARD

Color coded.

Joe sighs, closes his eyes, and bites his lower lip.

Now he regrets the way he treated Richard moments ago. He's embarrassed, but camera-lust overpowers him.

JOE

Look - maybe I was a little rude a moment ago.

RICHARD

I think you were.

Joe needs a plan - ponders his options - then makes an offer. He holds up his blueprints.

JOE

I'll show you my blueprints if you'll show me your SP.

RICHARD

I don't know...

JOE

Don't make me beg!

Richard smiles - hands him the camera. Joe hands him the blueprints. They each examine their prize.

RICHARD

This lens isn't big enough for a motion picture camera.

JOE

Look at the size of that RF window.

RICHARD

Wait a minute - you're indicating here a standard attachment thread size. Are you - are you designing a zoom lens for consumer use?

JOE

I figured out a way to make them lighter, smaller, and cheaper. The Japanese have been working on it for years - I solved all the problems they couldn't.

RICHARD

This is huge. Have you made a prototype?

JOE

I'm a designer - not a metal bender.

RICHARD

I have a little machine shop in my garage. I could help you make this.

JOE

Could you?

IRVING

Five o'clock. I'm getting outta here.

Don, Bill and Irving start packing up for the day.
Joe hands the camera back. Richard hands him the blueprints.

JOE

We'll talk some more.

DON

See ya tomorrow.

Don and Bill grab their suit coats, and begin to take their exits. Bill notices Irving has forgotten his coat.

BILL

Irving.

Irving turns, sees it, and grabs it.

DON

Screw that head on, buddy.

(to Mary)

You coming?

MARY

I've still got work to do.

Joe takes his blueprints, grabs his coat, and exits with the other engineers, leaving Mary and Richard alone.

A beat - then Don peeks momentarily around a corner. He leaves.

Most of the bright overhead fluorescent lights - hundreds of them in the Research Building - are shut down by maintenance for the day. The lighting becomes subdued.

Though she initially has no interest in New Guy, as the following dialogue progresses, there is a building sense of nerdy sensualism.

MARY

(booooring !)

So you were a football player.

RICHARD

Yeah.

MARY

I'll bet you had dozens of sorority girls all over you.

RICHARD

Actually, I only played one year. Busted my knee and had to quit. And there are no sororities at Caltech; it's men-only.

MARY.

Ah yes. Men only. I'm familiar with that environment.

Richard picks up the deck of cards on her desk.

RICHARD

You've been gambling since I got here. You play poker, too?

MARY

(grabbing the cards)

Only sailors and Mississippi harlots play poker.

She stows the cards in a desk drawer.

MARY

We play bridge. Every day at lunchtime.

RICHARD

Are you any good?

MARY

Am I any good!?

RICHARD

Yeah. Are you any good?

It's an affront - but she decides to answer.

MARY

Took second place in the county tournament last year.

RICHARD

If you had a better partner, maybe you would have taken first.

MARY

That's the excuse I've been using. Do you play?

RICHARD

Doesn't everybody?

With the knowledge that he is a bridge player, the flower of interest in New Guy begins to blossom.

MARY

So what about you - are you any good?

RICHARD

Am I any good?

MARY

Yeah - are you any good?

RICHARD

I don't play at tournament level, but I do win a few hands now and then.

MARY

Perhaps with the right partner you could play some tournaments.

RICHARD

What do you do here - besides winning bets.

MARY

I'm an analyst.

RICHARD

An analyst. What's that?

MARY

An analyst is someone engineers go to when they're too embarrassed to ask their fellow engineers for help. An analyst is someone who performs work others get promoted for. An analyst is someone who does twice the work of an engineer and gets paid half as much. An analyst is someone who wishes she could be judged strictly by her talents and abilities.

RICHARD

So you like your job.

MARY

The truth is, I do like it.

RICHARD

What's keeping you from being an engineer?

MARY.

A piece of paper.

RICHARD

What kind of projects do they have you on?

MARY

Theoretical performance calculations, mostly.

RICHARD

And that is...

MARY

Well, if you have two rocket propellants, and you want to know how well they'll perform...

RICHARD

Perform.

MARY

...together...

RICHARD

Together.

MARY

...without going to the time and expense of actually testing them, you come to me. It requires a lot of number crunching; the kind of grunt work that...

RICHARD

Grunt work?

Nervous - Mary knocks over the vase of flowers Don gave her. She picks it up and tries to appear nonchalant.

MARY

The kind of...grunt work...that most engineers don't like to do.

RICHARD

So you work with very powerful rocket propellant combinations.

MARY

Yes. Combinations. Of two.

RICHARD

Two.

MARY

Two. As in a pair.

RICHARD

As in a fuel...

MARY

...and an oxidizer. The oxidizer is very important.

RICHARD

Of course - it makes the fuel burn...

MARY

...hotter.

Tom enters - holding his suit coat and briefcase.

TOM

Mary -

Richard and Mary move apart as casually as possible, looking in different directions.

TOM

I convinced the Colonel you're the best person for the Redstone project. They're sending the contract over tomorrow. We'll start work on it immediately. Congratulations.

MARY

Thanks, Tom.

RICHARD

Good-night, Mister Meyers.

TOM

Call me Tom.

Tom looks at each of them - sensing that something is going on - then he exits.

Now the two of them are really alone.

MARY

I have work to do.

She moves toward her desk. He interrupts her.

RICHARD

Mary...

MARY

Yes?

RICHARD

Would you...

MARY

Would I...

RICHARD

...like to go out to dinner some time?

MARY

You mean - like a date?

RICHARD

Yeah. Like a date.

MARY

You're asking me on a date?

RICHARD

Sure. You've been on a date before.

MARY

Of course. Lots of them. Hundreds. Thousands.

RICHARD

Maybe you're too experienced for me.

MARY

No I'm not.
How many dates have you been on?

RICHARD

A few.

MARY

Hm.

RICHARD

So what is your answer?

MARY

Sure. Dinner sounds great.

RICHARD

Great.

MARY

Great.

RICHARD

Saturday?

MARY

Saturday.

Richard grabs his coat and starts to leave.

RICHARD

Good, night - Valedictorian.

MARY

Good night - tight end.

Shocked at the unintended double entendre, she slaps her hand over her mouth.

LIGHTS CUT TO BLACK

END SCENE 6.

SCENE 7.

LIGHTS UP on Tom's office.

Tom is alone - working at his desk.

Bill enters.

BILL
You wanted to see me?

TOM
Yeah, Bill - come on in.

Tom picks up a large manila envelope on his desk.

TOM
I just read the paper you and Mary are submitting for publication. It's very good. Top quality work.

BILL
So we can send it out?

TOM
Absolutely.

Tom hands him the envelope.

BILL
That's great.

TOM
Uh, however, you will have to make one small correction.

BILL
You found a mistake?

TOM
Yes. You identified Mary as an engineer. You can't do that - she's only an analyst.

BILL
She does the work of an engineer.

TOM
A stable boy can put on a band-aid; that doesn't make him a doctor.

BILL
That's not a fair comparison. She's every bit as good as the rest of us - and better than some.

TOM
Doesn't matter - company rules; no college degree - no title.

BILL

Tom - you're the one that put her in charge of the Redstone project. You obviously recognize her talents.

TOM

That's different. That's a project that just happens to be uniquely suited to her specialty.

BILL

If I can't list her as an engineer, I'm not going to publish.

Bill hands the envelope back to Tom.

TOM

Bill - don't get me wrong - we want you to publish. It'll be a feather in the cap of this department and the entire company. It's groundbreaking work. We're going to get contracts out of this. It's going to mean a lot of new work and a lot of money for everybody. You just have to change one lousy word. Change 'engineer' to 'analyst' and we're done.

BILL

Forget it. I've changed my mind - I'm not going to publish.

Bill leaves the office - entering the engineering area. Mary is the only person there - working at her desk.

Tom follows Bill and escorts him back to the office.

TOM

Bill - please.
Look; your paper is brilliant. It's going to be a career-maker for you.

BILL

I didn't write it.

TOM

What are you talking about?

BILL

(blows up)

I said I didn't write it! What; are you deaf!?

A few quiet beats - these men are colleagues who never argue.

BILL

Mary wrote it. She just put my name on it because I helped her out with some of the grunt work. I did some heats of formation calculations, a few other odds and ends. Yeah - I changed her title to engineer; that's one thing I wrote.

The phone on Bill's desk RINGS. Mary answers it.

MARY

Research...Just a moment.

Mary enters Tom's office.

MARY

Bill - you got a call.

BILL

And I'm not going to change it.

MARY

Change what?

TOM

We'll talk about this later.

BILL

I think we should talk about it right now. Let's talk, Tom. Let's tell everybody...

TOM

I said later!

Tom storms out of his own office and exits.

Bill and Mary return to the engineering area.

MARY

What was that about?

BILL

Just an argument over the Navaho injector manifold.

MARY

I thought we solved that problem.

They sit at their desks. Bill hangs up the phone without talking to whoever was on the other end.

They return to work. During the quiet moments that follow, Bill notices a change has come over his co-worker.

BILL
Are you smiling?

MARY
No.

BILL
Yes you were. You were smiling.

MARY
I was not smiling.

BILL
What is it?

MARY
Nothing.

BILL
Uh-huh.

They go back to work. A few beats - then Mary starts humming.

BILL
Oh my god you're humming.

MARY
Was I?

BILL
Yes - you were humming.

MARY
There's nothing wrong with humming.

BILL
I've worked next to you for eight years.
You have never hummed.

MARY
I just feel like humming today.

BILL
What is it?

No response - so he wheels his chair over to her desk.

BILL
Have you met somebody?

She just smiles.

BILL
Do you have a date?

She can't hide it any longer, and starts laughing. She nods.

BILL
Oh my god - good for you. When?

MARY
Saturday.

BILL
Saturday! This Saturday?

She smiles and nods. Bill is ecstatic for her.

BILL
Anybody I know?

The smile gets a little bigger.

BILL
You're not going out with Don...

He can tell by her reaction it's not Don.

BILL
Well who is it?

She crooks her head slightly toward Richard's desk.

BILL
New Guy? You're going out with
New Guy!?

She smiles and nods.

BILL
You little sex maniac.

They laugh and hug.

BILL
I am so proud of you!

As Bill returns to his desk he starts la-la-la-ing the Wedding March.

MARY
Bill!

LIGHTS FADE TO BLACK.

END. SCENE 7

CHURCH ORGAN MUSIC - the same wedding march - plays as an interlude. It fades, and we hear laughter and the clink of glasses.

SCENE 8.

LIGHTS UP on the Research Office.

A small office party. The desks have glasses, buckets of ice, bottles of champagne. There are some decorations. The engineers are busy preparing for the party. Everyone but Don seems to be happy.

DON

I can't believe she ended up with New Guy.

IRVING

Better get over it, buddy.

As Irving steps away to help with party decorations, Don grabs an open champagne bottle. He steps downstage and performs a monologue, ignored by everyone else. During the monologue Don pours and drinks and pours and drinks, and pours and drinks....

DON

I coulda gone to Caltech and played football and busted my knee and been the New Guy. I know how to be a New Guy. I can be the handsome New Guy who invades a company like John Wayne and the first day he's there he takes all the women - all one of them. I can do the John Wayne thing.
I'm articulate - I'm smart - I can do heat transfer. We didn't need a new heat transfer specialist - I can heat transfer my ass.
I studied thermodynamics - I know Fouriers Law. Conductance equals K over ΔX . I can pronounce Fouriers Law backwards - Wall-Sreerowf - Wool-Seeroofy - Wil-Seelysoolyruf.
Whatever.
I was doing thermal conductivity

calculations in the second grade.
I know all about proportionality
coefficients, phase changes, Dittus-Boelter
correlations. Chicks dig that sort of
thing.

It's the red hair, isn't it? I could be
born with red hair. I coulda changed my
genetic makeup. How was I supposed to know
she likes guys with red hair?

Who am I, anyway. I'm just some dumb schmuck
who brought her flowers every week.

I can be an inventor. I can make a new lens.
I can be the bad boy. I can wear
tattoos and ride a motorcycle. I can go
down the rabbit hole. I can be the
Cheshire cat! Meeooow!

IRVING

(finally noticing Don)

Have you been drinking?

Joe sees the newlywed couple approaching.

JOE

Here they come!

The engineers cheer as Richard and Mary - just married and wearing
their wedding clothes - enter. Mary wears a bridal veil, which
trails down her back.

Everyone except Don applauds and cheers their entrance. Don
raises his glass for a toast. He's drunk.

DON

To Mary and the New Guy.

Don swallows another glass of champagne.

RICHARD

How long does someone have to work around
here before people stop calling him the
New Guy?

JOE

Crumski - over in Fabrication; they called
him New Guy for twenty-three years.

RICHARD

What happened?

JOE

He retired.

IRVING

(holding up glass)

A toast.

May your propellants be exotic, and your
fuel tanks be ever full.

GROUP

Hazah!

They all take a drink.

MARY

I have one.

To my two favorite inventors; may they
rocket to the topet!

GROUP

Hazah!

They all take another drink.

RICHARD

Speaking of that - I brought the
prototype.

From his tuxedo pocket, he hands Joe a rudimentary zoom lens -
little more than a black tube - a simple prototype.

JOE

You finished it?

Joe replaces the lens on his camera with the new zoom lens.

MARY

You had that in your pocket the whole
time - during the ceremony?

Richard pulls another lens from the other pocket.

RICHARD

Made one for myself, too.

Mary just rolls her eyes.

JOE

(verge of tears)

It's beautiful.

IRVING

So tell us about the honeymoon.

RICHARD
We're going camping in Yellowstone.

BILL
Camping!?

IRVING
Gee, Richard - that doesn't sound like much
of a honeymoon.

Mary folds her arms and takes a defensive posture.

MARY
It was my idea.

IRVING
Oh. Great idea!

BILL
Absolutely!

DON
Fantastic!

A quiet moment of reflection, then -

JOE
First photo with the prototype.

Richard and Mary pose. Don horns in next to Mary.
Joe takes their picture.

MARY
I suppose we should go.

They kiss. There's no more to say - and everyone knows it.

Mary turns around and throws the corsage. Don catches it.
General laughter and hilarity. In that moment of perfect
happiness Tom Meyers shuffles in - head bowed, one hand in pocket
- the other hand holding a single sheet of paper.

The room quiets down. Mary loses her smile.

MARY
Tom - what's wrong?

Tom comes to stage front. Everyone pays attention.

TOM
Just got a teletype from Washington.
A half hour ago the Soviet Union placed

the world's first satellite into orbit.

Absolute stunned silence - it's a crushing blow. Mary takes the paper from Tom and examines it.

TOM

I'll be in my office.

He moves to go, then stops and turns to Richard, pulling a thick white envelope from his suit pocket.

TOM

This is from the management team - a little something to sweeten the honeymoon.

Tom stuffs the envelope in Richard's inside breast pocket.

TOM

The rest of you can go home early. Take the afternoon off.

Tom exits into his office.

A long stoic silence. Mary places the teletype on her desk.

MARY

Bill?

BILL

Yes, Mary.

MARY

Have we tried the amines, yet?

BILL

No. No, no no! No way! You need to leave - right now. You and your new family are what's important. Get going, Mary! Get going on that honeymoon! We can handle things here for a week.

MARY

Bill - I do believe the amines were next on our list. Is that correct?

BILL

Uh, well, yeah. Technically.

MARY

Don - if you could get me the heats of formation and densities on Etheline Diamine

and Diethyl Amine. Bill - I'll need the molecular weights, boiling points, vapor pressures. Irving, I'll need specific impulse figures using LOX. Richard...

The newlyweds exchange a look - this is not the way they planned to spend their week. She puts her arms around him and they kiss.

MARY

Richard...could you check out the comparative mixture ratios for me?

RICHARD

Sure.

Richard removes his tux jacket and hangs it on a chair. Everyone grabs a reference book, or a slide rule, or some other tool of the trade - and they all get quietly back to work.

Still in her wedding gown, Mary moves to the chalkboard. She begins to write a formula as -

LIGHTS FADE TO BLACK

END SCENE 8.

INTERMISSION

SCENE 9.

LIGHTS UP on two chairs. Paul Marsters - well dressed, and holding a clipboard with numerous papers - enters and looks around. He checks his watch. He seems impatient.

Mary enters. She is carrying a large school textbook. Her hair is tied up in a style we have not yet seen.

MARY

Are you Paul Marsters?

PAUL

Mary - thank you for meeting with me.
(shakes her hand)

MARY

I have to get to my math class...

PAUL

This will only take a moment.
Mary - I am what you might call a
recruiter.

MARY

A recruiter. You mean like for the
Army?

He smiles, then hands her a business card.

PAUL

No no. I work for a company; a company
that's looking to hire people with certain
talents.

MARY

(reads card)

Cleveland Manufacturing. What do you
manufacture?

PAUL

Oh, a little of this, a little of that.

MARY

How did you get my name?

PAUL

You were referred to us.

MARY

Referred by whom?

PAUL

One of your teachers.

MARY

Why me?

PAUL

The War has hurt this country, Miss
Sherman; more than many people are aware.
We have a lot of skilled jobs that are not
being filled.

MARY

Like...?

PAUL

Like Chemical Engineers. There's a big
shortage of trained chemists right now.

MARY

You're aware I'm just finishing my freshman year here.

PAUL

Oh yes - I know all about you. Your teachers give you glowing reports. You're at the top of your class in both math and science.

MARY

When you go to school in Ohio, you don't have a lot of competition.

PAUL

You're modest. I like that. How would you like to skip college and go straight into your career? We'll hire you as a chemist - right now. Not quite the same pay scale as if you had a degree, but close.

MARY

You must be desperate.

Paul says nothing - but we get the message.

She gives him his business card back.

MARY

Thank you for the offer, but I want to finish school, first.

PAUL

I'm not done telling you everything.

MARY

Well I'm done listening.

She turns to go.

PAUL

Mary - your country needs you!

MARY

(turns back)

Everybody needs me! It's been my lifelong problem. Do you have any idea how many cows I've milked, how many creamers I've cleaned, how many bales of hay I've tossed!? I've spent a lifetime doing things for other people.

College is something I finally get to do for myself! I've spent every day since I was nine years old dreaming of this moment, and you want me to throw it away!?

PAUL

(mood change)

You selfish little girl.
Do you know how many good, young American men die on the battlefield each day!?
If we don't bring this war to a close soon, Miss Sherman, our country could be looking at hundreds of thousands of casualties. Perhaps millions. Our boys are giving their blood - can't we give a little bit of our time?

He hands her the clipboard and she takes it.

MARY

How long would this job last?

PAUL

One year, tops.
Two years, tops.

MARY

I suppose I could continue my education taking night classes.

PAUL

Sure. You could do that.

But in his voice there is a hint of doubt.

MARY

One year - two at the most. You're sure.

PAUL

Absolutely. Scout's honor.

He hands her a pen.

MARY

What would I have to do?

PAUL

You'll need to apply for a top secret clearance - just a formality in your case.

Aren't too many Nazi spies coming out of Ray, North Dakota these days. Takes about a month. After that, you show up for work - seven thirty in the a.m.

She considers a moment - then signs a form. He takes the clipboard back.

PAUL

I promise - what you'll be working on will be a helluva lot more important than milking cows.

(shakes her hand)

Congratulations.

(moves to exit)

MARY

Hey - you still haven't told me what I'll be doing.

PAUL

A little of this - a little of that.

Paul Marsters exits.

END SCENE 9.

Mary puts down the textbook, hangs her purse on the chair, unbuttons the top button of her blouse, and removes the tie from her hair.

SCENE 10.

A DOCTOR enters - writing something on a clipboard. Mary is stoic as she re-buttons her blouse.

DOCTOR

It's not a death sentence. You'll probably live well into your eighties.

MARY

How did I get it?

DOCTOR

It's genetic. You inherited it from one of your parents.

MARY

They've never mentioned anything.

DOCTOR

They may not even know. The symptoms aren't always the same in every generation, or as severe.

MARY

We'll have to keep this confidential.

DOCTOR

It's nothing to be ashamed of...

MARY

I don't want anyone to know!

DOCTOR

Well you'll certainly have to tell your husband.

MARY

Especially not him.

DOCTOR

You're going to keep this from Richard?!

MARY

Yes.

DOCTOR

I don't think...

MARY

Dick works for the same company I do. I can't risk anyone at North American finding out.

DOCTOR

You're going to need support at home, Mary. This will be too big of a burden to handle on your own.

Preparing to leave, Mary puts on her jacket.

MARY

Watch me.

DOCTOR

You won't be able to hide this forever. Over the next few years the symptoms will become more acute.

MARY

I have a top secret clearance. I can't work at my job without it. How long do you think I'll be able to keep that clearance if someone finds out I have a mental problem?

DOCTOR

I wouldn't call it a mental problem...

MARY

That's what the government will call it!

She grabs her purse. The doctor tears off a prescription and holds it out. She refuses to take it.

MARY

No medication. Dick might find it.

DOCTOR

I think you're making a mistake.

MARY

Let me make one thing very clear: I never make mistakes.

She enters the main stage as LIGHTS FADE OUT on the doctor,

END SCENE 10.

SCENE 11.

LIGHTS COME UP on the main stage - the Research Department.

There are seven chemical formulas written on the chalkboard. They are (in order): Hydrogen, Hydrazine, Kerosene, Gasoline, Diethyl Amine, Ethylene Diamine, and Unsymmetrical Dimethyl Hydrazine.

Bill Weber enters holding some papers, and intercepts her.

BILL

I finished checking your calculations on the Amines. As usual, your work is flawless - not a single mistake.

She takes the papers, and he walks away to exit. When they are on opposite sides of the stage Bill stops - turns around.

BILL

Oh - uh - there was one thing. The specific impulse of DETA and LOX.

MARY

Two thirty-six.

BILL

Right - that's what we use. On the hill. But the Redstone will be taking off at the Cape - at sea level. So the initial ISP will be...

MARY

Two thirty-four.

BILL

A little thing. I took care of it. Good night.

Bill moves to exit. He is stopped by -

MARY

A little thing! You call using the wrong ISP value little!?

BILL

It's not a big deal...

MARY

We're trying to squeeze every ounce of force out the Redstone propulsion system we can! Two seconds of ISP isn't "little" - especially when it means the calculated takeoff thrust would be less than I calculated. It's a mistake in the wrong direction - it's huge - and you know it!

BILL

I know you're under a lot of pressure...

MARY

Don't be condescending! I hate it when the men around here do that!

Bill decides it's time to be honest and blunt.

BILL

Okay fine. It was a huge mistake. Ya screwed up. I covered your ass. No one will know.

MARY

I will know!

Bill moves to exit. He is stopped by -

MARY

Bill.

(breathe)

Thank you.

Bill exits.

Mary looks at the papers Bill gave her, then sets them on her desk. She sets her purse down.

Alone now, Mary sits at her desk and puts her head in her hands.

She looks up - grabs a pack of cigarettes - and begins to repetitively tap-tap-tap them into her hand. She suddenly catches herself - throws down the cigarettes - stands up - and stares at her hands - opening and closing her fingers several times.

She grabs a piece of chalk - then adds an eighth chemical formula to the board - the chemical formula for Diethylene Triamine. Suddenly frustrated, she throws the chalk hard across the room.

MARY

Properties and characteristics.
Characteristics, and properties.

She meanders around the office, taking occasional looks at the formulas. She addresses the audience.

MARY

Properties and characteristics.

As she walks around the desks thinking over the problem, Paul Marsters - carrying a card table - enters with Michael Sherman and Mrs. Walker.

PAUL

Mary - we have a jolly game of bridge for you.

The three of them set up the table and four chairs.

MRS. WALKER

Mary - we miss you so much.

During the following scene the three figures from Mary's past pester and distract her as they play bridge.

They may adlib additional lines as needed. As part of the distraction the three of them keep changing positions at the table, following her, looking over her shoulder, etc.

MARY

There are ten properties and characteristics our new propellant must have. One: it has to be commercially available. It's no good to us if we can't buy the stuff somewhere.
Two: We have to know its physical data. We can't work with a chemical we know nothing about - that's obvious.

PAUL

That's obvious!

MARY

Three: Our new fuel must have a low vapor pressure; it has to be a liquid at room temperature. The Redstone engine is not designed for a cryogenic fuel - the valves would freeze right up.

MICHAEL

Freeze up - like a North Dakota prairie winter.

Mary tries not to be distracted.

MARY

Then there's the mixture ratio. The engine is designed to use about one pound of oxidizer for every three-quarter pounds of fuel. Our new propellant must optimize at something close to that or we won't get the maximum energy from combustion.

PAUL

Mary - it's your lead.

Mary pauses a beat - goes to the table - picks up her cards.

MARY

What's trump?

MICHAEL

Hearts.

Standing - she plays a card - then places the remaining twelve cards back on the table. Play continues.

MARY

Five: It has to be stable. We don't want to blow up any of the technicians while they're loading the stuff into the rocket, do we?

MRS. WALKER

Oh - that would be unpleasant.

PAUL

It sure would!

MARY

Six: Controllable toxicity. We don't want to poison those techies, either.

Mary plays another card.

PAUL

You're trumping me?

MARY

Seven: It has to have a high heat of combustion. The hotter the flame, the more energy we get out of it.

MICHAEL

Did you clean the creamer, Mary?
Ya gotta clean the creamer!

MARY

Yes, daddy. You know I always clean it.

Another card - another hand.

MARY

Eight: Since the Redstone pumps the fuel around the engine to cool it off - just like a car's radiator pumps water - our new fuel must have good heat transfer characteristics. Otherwise the engine could burn up in seconds.

MRS. WALKER

We sure miss you, Mary. Everybody in Ray wants you to come home.

MARY

Nine: It should have a low molecular weight.

Another card - another hand.

MARY

Ten: Our new propellant should have a high Hydrogen/Carbon ratio, again for the purpose of maximizing our combustion. Let's see - is there anything I've forgotten?

MRS. WALKER

Did you mention density?

MARY

Oh yes - density. Density.

Mary seems lost in thought for a few moments. There's something about density...

Another card - another hand.

MARY

Density, yes. Our fuel should have a high density; the more molecules we can cram into the fuel tank the better. So that's it - just eleven little things. Eleven properties and characteristics that our fuel must have that make our search essentially impossible. The propellant we need God has not yet created.

PAUL

God has not yet created it.

MRS. WALKER

My goodness; that's a dilemma.

She contemplates the formulas on the chalkboard.

MARY

Let me illustrate the problem. There are eight possible fuels that could give us the required specific impulse. Pure Hydrogen would be the best; high energy and no other atoms to get in the way. But to get a high density in the propellant tank you have to use it in liquid form, and as we all know liquid hydrogen is not available in large quantities. Either way it's cryogenic; so not compatible with the Redstone hardware.

She erases the formula for Hydrogen.

PAUL

You gonna talk or play cards?

She plays a card.

MARY

We could use Hydrazine - commercially available; good. High heat of formation - very good. But it's extremely toxic and highly unstable when heated. Rockets with regeneratively cooled engines - like the Redstone - blow up whenever they try to use this stuff. Hydrazine is out.

She erases the formula for Hydrazine.

MRS. WALKER

There we go with the "blow up" stuff again.

MARY

Kerosene. High energy - superior to alcohol, but it has a much different mixture ratio with LOX. So it's incompatible with the Redstone hardware.

Mary plays a card - then erases the formula for Kerosene.

MARY

Same problem with Gasoline.

She erases the formula for Gasoline.

MICHAEL

Gotta clean the creamer, Mary. No time for foolishness like school.

MARY

Diethyl Amine has some good properties, but it has a low boiling point, which makes it a poor engine coolant.

She erases the formula for Diethyl Amine.

PAUL

Don't worry about college, Mary. Your country needs you now.

She goes to play her next card - and sees something Paul has done she doesn't like.

MARY

You led with the Queen of Hearts? I have the King. You used up my best trump card.

She tosses the card onto the table. Paul points to Mrs. Walker.

PAUL

You told me to play that card!

MRS. WALKER

I'm such a dummy.

MARY

Ethylene Diamine: $C_2H_8N_2$ - so it has a high hydrogen/carbon ratio. But it also has a high vapor pressure. It's like Propane; to keep it in a liquid state you have to keep it under pressure. The fuel tank would be too heavy.

She plays another card, then erases the formula for Ethylene Diamine.

MRS. WALKER

Think of the children. The school needs you, Mary.

MICHAEL

Forget about the schoolhouse. It's the farmhouse that's important.

MARY

That brings us to Unsymmetrical Dimethyl Hydrazine. UDMH for short. This stuff was invented by the Soviets about eight years ago. Excellent performance...

Throws down another card.

MARY

...characteristics. I'd love to use it, but its density is too low - we wouldn't be able to fit as much as we need into the Redstone fuel tank.

She erases the formula for Unsymmetrical Dimethyl Hydrazine.

MARY

Last but not least - Diethylene Triamine. Also referred to as "DETA." Not as powerful as UDMH and some of the others,

but at .96 grams per cubic centimeter its density is just terrific.

MRS. WALKER

(to Paul, Michael)

I told you density was important.

MARY

Unfortunately the mixture ratio with LOX and DETA is off spec. Again - not compatible with the Redstone hardware.

She tosses in the last card of her hand.

MARY

Which leaves us with...

The three card players get up and start following her.

Mary erases the formula for Diethylene Triamine. The chalkboard is now blank.

MARY

...absolutely nothing.

MRS. WALKER

The children need you, Mary.

MICHAEL

The farm needs you.

PAUL

Your country needs you.

MARY

Quiet! I'm trying to think!

A quite moment.

MICHAEL

(to Paul)

Did you know the specific impulse of DETA and LOX at sea level is two hundred and thirty-four seconds?

PAUL

Oh yeah.

MRS. WALKER

Well of course - everybody knows that.

MARY

SHUT UP!

LIGHTS FADE TO BLACK

END SCENE 11.

SCENE 12.

LIGHTS UP on the office of Tom Meyers.

Tom is working at his desk. A few beats, then Don - nervous and breathless - runs in.

DON

He's here! He's in the building!

TOM

Who?

DON

Mister Big. Mr. Mucky-Muck himself.

TOM

Phil Ellsworth? So what.

DON

No! Not that butt-scratcher! I mean the real Mr. Big - The Legend - Dutch Kindelberger!

TOM

Nice try, Jenkins. Kindelberger hasn't visited this plant in ten years.

DON

Hand to god - and he's heading this way.

Tom is not sure if he should believe him.

DON

You better get that desk cleaned up, pardner.

Don quickly exits. Tom decides Don could be telling the truth, and rushes to clean up his desk before -

Dutch Kindelberger enters. He is in his late sixties, ramrod straight, and wears a tailored suit and white shirt. A cloud of absolute authority hovers over his head.

DUTCH
Hello, Tom.

TOM
Mr. Kindelberger.

DUTCH
Mind if I come in?

TOM
It's your company, sir; you can go wherever you want.

DUTCH
I know. But courtesy, Tom. Never forget it. Courtesy goes a long way.

Dutch makes himself at home.

DUTCH
How have you been, Tom?

TOM
Great.

DUTCH
The wife - kids?

TOM
We're all doing just fine.

DUTCH
Wonderful. Having a family is a wonderful thing, isn't it?

TOM
Yes, sir; it is.

DUTCH
And being able to support them; that's a wonderful thing, too.

TOM
Absolutely.

DUTCH
Hope you don't mind me barging in like this, Tom, but I keep getting calls from

all sorts of people - politicians, Army generals, mucky-mucks up the wahzoo. Some kid named Dwight keeps calling me - claims to be the President of the United States or something. Like I have time for somebody like that. I even got a call from Wernher Von Braun.

TOM

No kidding. I've never met the man. That must have been interesting.

DUTCH

It was. Ya know, in World War Two this company built thousands of planes and bombers designed to kill the sonovabitch. Now he works for us.

TOM

Strange how life works out.

DUTCH

There's a lot at stake here, Tom. I've given my heart and soul, my life, and every penny I have to build this company. We have a great reputation with our customers. Now that reputation is on the line.

TOM

I know that, sir. And you know we've always put out a quality product.

DUTCH

Of course. Still - there's this girl. What's her name - the one you got on the propellant contract.

TOM

Mary Morgan.

DUTCH

How's she comin' along?

TOM

Real good. She's making steady progress.

DUTCH

Don't bullshit me, Tom.

TOM

She's...struggling; but remember - not even Von Braun's best engineers could solve this problem.

DUTCH

Hm. You know I trust you.

TOM

I hope so.

DUTCH

I know you wouldn't do anything to jeopardize my company - or your job. Would you.

TOM

No sir. I'm very happy working at North American.

DUTCH

We're in an undeclared space race here, Tom. Russia puts a satellite into orbit one day, and the next day America is some snot-nosed pooper grabbing his mommy's skirt and crying to have his diaper changed.

I always said, "First country to put a satellite into orbit will be on top of the world." Ya can't buy that kind of prestige with money, Tom. You buy it with grit. You buy it with risk. You buy it with balls.

"The whole world," I said. "The whole world is going to look to that country as a leader. And the company that puts them there - they're gonna to get a helluva lot of contracts.

We don't want the world doing business with the Russians, do we, Tom? Hell - they're all bunch 'o communists - whatta they care about business anyway?

TOM

With all due respect, sir, America could have been in orbit a year ago if we had an engineer in the White House instead of a politician.

DUTCH

Maybe you should run next time.
(a beat or two)

Two hundred years from now some star-struck fifth grader will be sitting in physical science class, and his teacher will tell him how Russia was the first country to place a satellite into orbit. It's an accomplishment that will live forever. No one will ever be able to take it from them.

TOM

That's true, sir.

DUTCH

This girl - Morgan. Any chance things would go a little faster if we put somebody else on it?

TOM

I honestly don't think so. And even if I found someone better, I wouldn't do it.

DUTCH

Why the hell not!?

TOM

Because, sir; courtesy goes a long way.

DUTCH

Yes. Yes it does.

(all's quiet)

Well - I guess that's that.

Dutch retrieves a golf club from Tom's golf bag and holds it up it in what appears for a moment a threatening gesture.

He then takes a drive position and takes a practice swing.

DUTCH

You going to be at the Downey Golf Tournament this year?

TOM

Wouldn't miss it, sir.

DUTCH

Good.

Dutch puts the golf club on Tom's desk.

DUTCH

Ya know, Tom - you outta try to keep your desk a little cleaner.

TOM

I will, sir.

Dutch moves to the door.

DUTCH

Tell Gloria I said 'hi'.

Dutch exits. Tom lets out a long exhale.

Mary is working alone at her desk. She sees Dutch leave Tom's office.

She works quietly for a few moments, then Tom exits his office and approaches her desk.

TOM

Mary?

MARY

Yes, Tom.

TOM

Could I have a minute?

He has trouble starting - something is on his mind. She reads it.

MARY

You want to know how the Redstone project is going.

TOM

Yes I do.

MARY

And you want to know before our usual Monday morning briefing.

TOM

Yes.

MARY

We've eliminated the Amine compounds. We're going to take another look at a couple of the hydrocarbons...

TOM

You know what I mean.

MARY

I am going solve this, Tom.

TOM

How much longer do you think it will take?

MARY

I don't know, maybe...

TOM

(loses his cool)

How much longer!?

His anger quiets her and she's not certain how to respond.

TOM

This chalkboard. This desk. These books. This slide rule. Simple, innocuous objects. Nothing glamorous or special about them. But they're the same tools the Russians have - and they managed to get into orbit using them. We promised the Army we'd have this done two months ago - and you're no closer than you were when you started.

MARY

That's not true - we're a lot closer. It's a process of elimination. We keep eliminating compounds that won't work till we find one that does.

TOM

How many have you eliminated?

MARY

Well...all of them, but...

TOM

So that's it? We're all done? Should I tell the Army we failed? Do you have any idea how much of our paychecks depends on government contracts? Don't answer - I'll tell you: all of it! Everything we work on in this department gets its funding from the Feds. You know what happens when they award a contract and you fail? You know what they do!? Don't answer - I'll tell you; they send the next twenty contracts to our competitors! And we hand out pink slips!

MARY

What do you want, Tom?

TOM

I want to know when you're going to finish.

MARY

What do you want, Tom?

TOM

I want to know when you're going to finish!

MARY

What do you want, Tom!?

TOM

(shouting)

I want a deadline!

MARY

I can't give you one!

TOM

The rocket is sitting on the pad at the Cape. It's fuel tank is empty. A thousand engineers and technicians are waiting for us to tell them what to fill it with. Our country's entire space program is on hold - and it's holding for you, Mary!

MARY

I saw you got a visit from The Dutchman.

TOM

Oh yeah.

MARY

So, what; shit runs downhill?

TOM

They haven't changed the laws of gravity.

MARY

Tell them I'll have it done by next Friday.

TOM

Really?

MARY

Really.

TOM

Next Friday's good. Next Friday's very good. And I can tell the customer?

MARY

Sure.

TOM

Good. Thank you. Thank you!

Tom exits.

Mary pages through the reference book for a bit, then slams the book down hard on her desk.

She grabs her hair, breathing heavily. She releases it. She picks up a pack of cigarettes and starts nervously tap-tapping it into the palm of her hand. She paces the room.

A few beats - then she catches herself, and puts the cigarette pack back down - then leans against her desk. A beat or two to calm herself down.

LIGHTS OFF A BEAT - LIGHTS UP

Mary is sitting at a different part of the office studying another reference book. Tom enters.

TOM

It's Friday. Do you have it?

MARY

Looking good for next week, sir.

TOM

Another week! You said...

She holds up an index finger to shush him. He turns and exits.

LIGHTS OFF A BEAT - LIGHTS UP

Mary is working at another desk. Tom enters.

TOM

It's Friday.

MARY

One more week.

Tom reluctantly exits.

LIGHTS OFF A BEAT - LIGHTS UP

Mary is at yet another desk, working with a slide rule. Tom enters.

TOM

It's Fri...

MARY

Another week.

TOM

This is it, Mary. It's over. You don't have it by next week, I'm giving the project Irving.

Tom exits.

LIGHTS OFF A BEAT - LIGHTS UP

Mary is laying on one of the desks singing "Fly Me To The Moon."

Bill Weber enters, carrying a mug of coffee.

BILL

Good morning.

He sits at his desk, arranging some papers. The phone on Mary's desk rings. She walks over and picks up.

MARY

Research.

(a beat)

Yes, this is her.

A few beats, then Mary quietly sets down the receiver.

BILL

Something wrong?

(no response)

What is it?

MARY

My father just passed away.

BILL

Oh Mary - I'm so sorry.

Is there anything I can do?

She stands up and faces him.

MARY

Yes. You can figure out how to put Unsymmetrical Dimethyl Hydrazine into the Redstone, and make it work.

LIGHTS FADE BLACK as Mary exits.

END SCENE 12.

SCENE 13.

The interior of Saint Catherine of Sienna Catholic Church in Ray, North Dakota. A confessional.

Father Mackey, dressed in his priestly blacks and white collar, sits on his side of the confessional.

Mary enters - wearing a black lace veil. She faces the audience and genuflects once - making the sign of the cross.

She enters the confessional and Father Mackey opens the panel.

MARY

Bless me, Father, for I have sinned.
It has been one month since my last
confession.

FATHER

Mary? Is that you?

MARY

Yes, Father.

FATHER

It's good to have you back in Ray.
Unburden your soul, my daughter.

MARY

Father, I have committed the sin of anger.
And I have lied.

FATHER

Lied? That doesn't sound like you. Who
did you lie to?

MARY

The Federal Government of the United States
of America.

FATHER

Hoo boy.

MARY

Although, I'm not exactly certain if it was
a lie, per se.

FATHER

What did you tell them?

MARY

This contract I'm working on; I told them I would have it ready four weeks ago.

FATHER

Did you know it would not be ready?

MARY

Yeah.

FATHER

Well yes, that was a lie.

MARY

And I've been angry with my boss - and some of my co-workers - and my husband.

FATHER

Husband?

MARY

Oh, I forgot to tell you. I got married.

FATHER

Married! A good Catholic boy, I assume.

MARY

No, Father.

FATHER

Any chance he might convert?

MARY

I don't think so.

FATHER

That's disappointing. You know how I feel - people should always marry within their own faiths. It just works out better.

MARY

I know, Father. But I was so conflicted; he's handsome, and witty, and a brilliant engineer.

(a beat)

He's kind of a mediocre bridge player, but I'm teaching him.

FATHER

Mary - do you really believe any of those reasons are substantial enough to lead one to a life-long commitment? What else can you tell me about him?

Mary really wants the priest to be impressed with Richard.

MARY

Well...he played college football in the Rose Bowl.

FATHER

Did he!

MARY

More than once.

FATHER

More than once! Hm. Now I'm conflicted.
(a beat)
You said you were having a problem with anger. What is the source of this anger?

MARY

I'm under a lot of pressure at work. The stress is unbelievable.

FATHER

Tell me about it.

MARY

You know, Father, my work is all top secret. I would probably be breaking the law by discussing it with you.

FATHER

The power of the confessional will protect you. Now tell me how it's going.

MARY

So far it's a complete failure. I'm a complete failure. I thought I could do it, but the computations and permutations - there's just too many of them. It's all too complex. They're asking me to do the impossible.

FATHER

Did not our Father in Heaven ask the same thing of our Lord Jesus?

MARY

Yes, Father.

FATHER

Christ came to Earth to show us the way to live. Everyone has moments in their life when they are faced with having to accomplish the impossible. This is your moment, Mary. You need to remember and ponder the example of our Lord and Savior.

MARY

Yes, Father.

FATHER

What is it about your work that seems so impossible? Is it that fuel problem you were telling me about?

MARY

Dr. Von Braun is already using what I consider the perfect propellant combination for the Redstone - LOX and Alcohol...

FATHER

LOX?

MARY

That's short for liquid oxygen.

FATHER

Ah.

MARY

I'd like to substitute the alcohol with Unsymmetrical...

FATHER

What!? Take it from an old Irishman - there's no substitute for alcohol.

MARY

The problem, Father, is that God has not yet created the fuel we need.

FATHER

Well then, maybe you should create it. God never built an airplane - that didn't stop the Wright Brothers.

MARY

Yes, Father.

A long sigh from the priest. How does he give advice on this subject?

FATHER

Every evening after dinner I have a small glass of brandy. It helps me unwind. Recently I started adding a pinch of Tabasco sauce to give it an extra kick. Just a small amount - but it makes a big improvement. Maybe that's what you need. Instead of replacing this fuel, you should just add something to it. You know - give it an extra kick.

Mary stands up and steps out of the confessional - standing just outside of it, lost in thought. She has a "Eureka" moment - and exits on a run.

The priest is unaware she has gone.

FATHER

Of course, I'm really not qualified to give advice on this subject. Anyway - those are my thought on the matter. For your penance say three Hail Marys and two Our Fathers.

H begins to give her a Latin blessing...

FATHER

Dominus noster Jesus Christus te absolvat;
et ego auctoritate ipsius...

...then realizes she's not there.

FATHER

Mary?

He steps out of the confessional and looks around.

FATHER

Mary!?

LIGHTS FADE TO BLACK.

END SCENE 13.

SCENE 14.

LIGHTS UP on the Research Office. Irving, Joe and Bill are at their desks. There is a dark, somber mood. No one speaks - it's as if they were at a funeral.

Joe aimlessly tosses crumpled balls of paper into a waste basket ten feet away.

Mary enters on a run - breathless. She opens a reference book.

MARY

Bill - UDMH and DETA - are they miscible?

No one pays attention. She pages frantically through the book.

MARY

Did you hear me? Are they miscible?
Where's Richard?

BILL

He's on the hill - doing a test on the new engine. Is what miscible?

MARY

UDMH and DETA.

IRVING

Yes - they're miscible.

BILL

What does that matter?

MARY

I've been going about this all wrong. All this time I thought it was a process of elimination. It's not elimination, it's creation. We're going to create a brand new fuel.

She slams the book closed, then paces the room.

MARY

We discarded Unsymmetrical Dimethyl Hydrazine. Why. Because of the density problem. But who says the fuel has to be all UDMH? What if we remove a small portion, and replace it with a denser fuel, like Diethyl Triamine. You'll get some of the benefits of both: a higher specific impulse, and a better density. It's like a

rocket cocktail - like adding Tabasco sauce to brandy. The only question now is - how much UDMH do we remove, and how much DETA do we add. Ten percent? Fifteen percent? It doesn't matter - because now it's just a matter of number crunching - to find the ideal mixture. This is it! This is the answer!

BILL

(insincere)

That's great, Mary.

IRVING

Yeah. We're very proud of you.

For the first time Mary notices the somber mood.

MARY

You don't seem very excited. Don't you get it - this is the answer. We're going into space!

You guys look like you're at a funeral.

JOE

You didn't hear the news?

MARY

What's happened?

IRVING

This morning the Russians placed a dog into orbit.

MARY

A dog? You mean a live dog?

BILL

Yep. It's up there. Barking and skipping and shitting through space.

MARY

Why put a dog...

JOE

They're experimenting with life support systems.

IRVING

First you put up a satellite...

BILL

Then an animal...

MARY

...then a human.

JOE

They're going to have a man in orbit before
we have so much as a nut or bolt.

Mary collapses into her desk chair, joining the somber mood.

IRVING

If a Russian dog barks at an American dog,
do they understand each other?

Mary stands up and retrieves the card table. She sets it up, then
rolls her desk chair next to it. She grabs a deck of cards, sits
down, and starts dealing four hands.

JOE

Mary - it's not lunch time.

She keeps dealing. Bill rolls his chair over and joins her.
A beat or two, then Joe rolls over, too.

Don enters from Tom Meyers' office.

DON

Mary. Mister Meyers wants to see you
in his office.

MARY

Not now.

DON

He said it was urgent.

MARY

Tell him I'm playing bridge and I cannot
be disturbed.

DON

I - I can't tell him that.

BILL

(shouting to Tom)

She's playing bridge and she cannot be
disturbed!

TOM

Okay!

Tom CLUNKS a large bottle of Scotch onto his desk, then CLUNKS down a large glass.

Don wheels his chair over, becoming the fourth player.

DON
This department is getting stranger by
the day.

The cards are dealt and the players begin the bidding.

JOE
Two hearts.

BILL
So we get the higher performance by
using UDMH...

DON
Two spades.

JOE
...and we solve the density problem
by mixing in some DETA.

BILL
Four hearts.

DON
That's a pretty good idea.

Irving stands in kibitz position.

IRVING
I would have thought of that
eventually.

MARY
Four spades.

The other three players "pass." The first hand begins.

IRVING
Play the diamond.

LIGHTS FADE TO BLACK as the bridge game continues.

END SCENE 14.

SCENE 15.

LIGHTS UP on the Research Office, two weeks later. All the engineers are present. A party. Drinks. A punchbowl. Hors d'oeuvres.

Richard and Joe are at their desks holding small foreign language help books and conversing in basic Japanese.

The phonetic pronunciation is listed for each sentence.

JOE

Mor-u'go-san, oh gen-key dess' ka?

RICHARD

High, gen-key dess. Foo-ree-doh-mahn-sahn wah?

JOE

High, oh kah-geh sama de.

RICHARD

Oh the-ah-rye wah doh-koh dess' kah?

Mary enters carrying a coffee cup.

MARY

Hi, Honey.

She heads to her desk.

JOE

Reh-stoh-rahn no u-rah ni ah-ree-mahss'

RICHARD

Doh-moh a-ree-gah-toh go-zye-mahss'.
Ee-mah ee-kee-mahss'.

MARY

How's the language lesson going?

RICHARD

It's going foo-tsoo yo-ree oi-shee dess'.

Both men laugh.

MARY

You're not funny.

Joe points at Richard.

JOE

Oh-kash'-koo-nye dess'!

Both men laugh even harder. Mary rolls her eyes.
Richard stands up and grabs a small suitcase.

RICHARD

Wish me luck.

He and Mary peck a kiss.

MARY

Good luck. Got your passport?

He pats his coat pocket, then heads for the door. Joe waves
good-bye.

JOE

Mor-u'go-sahn, saw-yo-nah-rah!

RICHARD

Foo-ree-doh-mahn-sahn, saw-yo-nah-rah!

JOE

Saw-yo-nah-rah!

RICHARD

Saw-yo-nah-rah!

MARY, DON, IRVING, JOE

Go!

Tom passes Richard as he is exiting.

TOM

Sayo - whatever.

Tom joins the party. He approaches Mary.

TOM

Just got back from talking to the mucky-
mucks upstairs. They've approved your
research.

Everyone applauds.

TOM

Colonel Wilkens will be by any moment
to pick it up.

Tom removes a letter from his coat pocket and unfolds it.

TOM

I received a letter this morning that I'd like to read.

(unfolds the paper)

Dear Tom - please offer my congratulations to Mrs. Morgan for her fine work with the Redstone propellant project. With superior engineers like her I am confident our company will have a bright and prosperous future. Best Wishes, Dutch Kindelberger.

He refolds the letter.

TOM

You probably noticed he used the word "engineer." I suppose if calling Mary an engineer is okay with Mr. Kindelberger, then it's okay with me.

Tom shakes Mary's hand.

TOM

Congratulations.

Her fellow engineers applaud. Colonel Wilkins enters.

TOM

Colonel - you're just in time. I was about to discuss naming our new propellant. Since the right to name any new invention traditionally goes to its inventor - Mary; what do you think?

MARY

Well, I think we should call it Bagel.

TOM

Bagel?

MARY

Yes - that way we can say the Redstone's propellant combination is LOX and Bagel.

Her fellow engineers laugh, but not Tom or the Colonel.

TOM

I don't think the boys upstairs are gonna go for that.

MARY

Then let them name it. I've got work to do.

COLONEL WILKINS

If it's all the same to you, the Army has already chosen a name. We want to call it Hydyne.

MARY

Hydyne. Not as funny as Bagel.

COLONEL WILKINS

The Army believes this is going to be the propellant of the future.

He takes a step toward Mary and they shake hands.

COLONEL WILKINS

The Army thanks you for your service. Mr. Meyers - if you have a moment there's another contract I'd like to discuss.

The Colonel follows Tom to his office. At that moment DAVID SHELBY - wearing a "VISITOR" badge and carrying a small notebook - enters.

DON

Who's this?

DAVID

I'm looking for Mrs. Morgan.

MARY

That's me.

DAVID

Hi - I'm David Shelby from Life Magazine. I'd like to discuss doing a feature article on you.

MARY

No. Get out.

DAVID

Get out? I said Life Magazine.

IRVING

You heard her - get out.

BILL

Mary - maybe you should talk to him.

DAVID

Mrs. Morgan - there's an entire world out there completely oblivious to what you have

accomplished here. Life Magazine is going to be your partner to fame and fortune. We're gonna make Mary Sherman Morgan a household word.

MARY

That's three words.

DAVID

I've already written most of the article; I just need to fill in a few details.

MARY

I want you to leave.

BILL

Mary...

DAVID

Leave? You can't be serious.

MARY

You think everybody wants to be famous? Everybody wants to be a celebrity? Some of us are perfectly happy living quiet, anonymous lives. Does that surprise you?

DAVID

Yes!

MARY

If you print anything with my name in it, I'll sue you - and your publisher.

JOE

I think it's time for you to go.

The male engineers, except Bill, intrude on the reporter's space.

DAVID

This is insane! You've made history here - people are going to want to know about it.

The engineers, except for Bill, steer David toward the exit. He struggles to remain.

DAVID

STOOOOOP!

Everyone stops. He turns and runs back to Mary's desk.

DAVID

Mrs. Morgan - the Media is mankind's last great hope for immortality! If you push me away, whatever legacy you might have had will gradually be extinguished - like a light fading out in a darkened room!

The male engineers grab him bodily and toss him out of the office. Off stage we hear the sound of large heavy objects crashing.

Tom comes out of his office to investigate. Irving stops him.

IRVING

We got it under control.

Tom's puzzled, but he returns to his office.

DON

I've done my work for the day.

Don and Joe put on their suit coats. They and Irving say their good-byes and move to exit. Don notices Irving has forgotten his coat again.

JOE

Hey - Mister Forgetfull.

Irving remembers - grabs his coat - and the three of them exit. Mary and Bill are left alone.

MARY

Life Magazine. I wonder how on Earth they got my name.

She grabs her purse and moves to exit. She slows, stops, realizes the truth, then returns.

MARY

You called them. Didn't you.

(no response)

Bill?

BILL

I just felt it was time for you to get a little notoriety for your work.

MARY

I don't want notoriety - I'm not some publicity hound like Von Braun. All I want out of life is a husband that loves me, a job that challenges me, and

bridge partners that are skilled enough to beat me every once in a while.

BILL

Yeah, well, I guess we're still working on number three.

She pulls her car keys from her purse.

MARY

Please don't do that again.

Mary exits - leaving a dejected Bill alone.

LIGHTS FADE TO BLACK.

In complete darkness, an audio recording is played of the last twenty seconds prior, and first thirty seconds after, the launch of Explorer 1. A copy of this recording can be found at: <http://www.youtube.com/watch?v=JgguaLjyna8&NR=1>

END SCENE 15.

SCENE 16.

A few beats - then a small campfire breaks through the darkness. A sooty metal coffee pot sits close, its contents warming.

The fire SPITS and POPS a few times.

The sound of WIND - not too harsh.

The sounds of BRANCHES BEING BROKEN and AXED IN HALF off stage is heard. A few beats of silence, then the sounds are repeated.

FOOTSTEPS and a DRAGGING SOUND. Richard, wearing a warm jacket, enters the firelight, dragging several dead pine branches. He sets aside a small hand axe, then places a thick branch on the fire.

There is a log for sitting, and he takes a seat. He grabs a metal cup and pours some coffee into it. He stokes the fire, then puts on another branch. He takes his time - he's on vacation.

The sound of more branches CRACKING somewhere out in the dark forest is heard. Then Mary - also dressed warmly - enters, carrying more firewood. She drops the wood by the fire. Mary leans over the fire and warms her hands.

RICHARD
Great day today.

MARY
It was wonderful.

He hands her the now filled coffee cup, then fills his own.

RICHARD
Think we'll run into any bears out here?

MARY
I sure hope so.

Mary sits next to him on the log and they snuggle close.

MARY
Hope you didn't mind having to wait for
the honeymoon.

RICHARD
Nah.

MARY
Really?

He holds her tight, she sips some coffee, and they watch the fire.

Their peace is interrupted by the sound of APPROACHING FOOTSTEPS.
They look up - to see a Yellowstone Ranger enter their camp.

RANGER
Howdy, folks!

MARY
Good evening.

RANGER
Welcome to Yellowstone - the world's
first national park.
Saw your fire - thought I'd come over. We
don't get many campers this time of year.
(looks around)
You practically have the place to
yourselves.

MARY
Fine with us.

RANGER
Been having a good time?

RICHARD
You bet. We drove up to see Old Faithful
this afternoon.

RANGER
Old Faithful. Yessir.
You take a lot of pictures?

RICHARD
Oh yeah.

He holds up his camera with the prototype zoom lens.

RANGER
What's that on your camera?

RICHARD
It's a zoom lens - a new design that's
a lot smaller and lighter.

RANGER
May I see it?

Richard hands him the camera.

RANGER
I'm kind of an amateur photographer.
(examines the lens)
Boy, that is a lot lighter. Big
improvement.

MARY
Would you take our picture?

RANGER
Sure!

He steps back and focuses the lens.

RANGER
Say "grizzly."

RICHARD AND MARY
Grizzly.

The Ranger takes the picture, then hands the camera back.

Yes - the following dialogue includes sexual double entendres.

RANGER

Seen any other geysers since you've been here?

Richard and Mary kiss - and continue enjoying each other's company during the geyser dialogue.

MARY

Several.

RANGER

You all know how a geyser works?

MARY

Surface water seeps through rocks until it comes in contact with super-heated magma.

RICHARD

The water at the bottom of the geyser becomes geothermally heated, while the water at the top cools off.

MARY

This causes a convection effect, with the heated water rising to temperatures above the boiling point.

RICHARD

Steam rises to the top, causing a release of pressure...

MARY

...forcing a combination of steam and water to expand and spray out the geyser's vent.

The ranger senses there's something more going on than geyser talk, but keeps his professional composure.

RANGER

That's absolutely correct!

MARY

Well, you know - it's not rocket science.

RANGER

No, ma'am.
Well - You all have a good evening.

The Ranger exits, and Richard takes a last sip of coffee. Peace and quiet for a few beats.

MARY

The engineering department at the Downey plant is having a bridge tournament next week. I signed us up.

The WIND PICKS UP - louder now - and it blows the fire out as LIGHTS FADE TO BLACK.

END SCENE 16.

SOUND OF WIND continues - then FADES OUT.

SCENE 17.

LIGHTS FADE UP on a bar in Los Angeles. Irving is sitting on a bar stool, nursing his drink. His briefcase rests on the floor.

He stirs his drink - then downs the whole thing. He speaks to an unseen bartender.

IRVING

I need a refill. Hey - buddy!

He holds up his empty glass. The bartender takes the empty glass.

Don joins Irving on a second barstool.

DON

Looks like it's gonna rain.

The bartender brings Irving his drink.

DON

A Coke.

The bartender leaves to fetch it.

IRVING

Coke?

DON

It's the pause that refreshes.

Irving takes a sip - then begins to expound.

IRVING

Ya know - I'm not just some dimwit with a degree - right?

DON

You invented Red Fuming Nitric Acid.

IRVING

Bet your ass.

The bartender gives Don his Coke.

IRVING

I got a big future in the aerospace business. A big future. Rocket to the topet.

DON

Rocket to the topet.

They clink glasses, then down their drinks.

Irving throws some money on the bar.

IRVING

See ya Monday.

He staggers out - conspicuously leaving behind the briefcase. The bartender takes Irving's glass.

DON

Where's your bathroom?

The bartender points. Don leaves some money on the bar, then exits.

LIGHTS FADE TO BLACK - except ONE SPOT on the briefcase. Then the SPOT BLACKS OUT.

LIGHTS UP on the obit department of the LA Times. Barbara is working. Carley enters.

CARLEY

Hi Barbara.

BARBARA

Miss Morgan.

CARLEY

I sent you the signed affidavits - did you get them?

BARBARA

I did.

CARLEY

So do you have everything you need? Can we get my grandmother's obituary published?

BARBARA

No.

CARLEY

No!? Why not!?

Barbara finds the affidavits on her desk and picks them up.

BARBARA

I told you - we need independent verification. You are the source of all this information. It doesn't qualify as independent.

CARLEY

An obituary is a person's last chance to tell the world who they were and what they accomplished. If you don't print it, my grandmother's legacy will disappear forever.

BARBARA

I'm sorry.

Carley turns and finds Mary standing there. They hug.

CARLEY

I'm sorry, grandma.

MARY

It's not your fault.

CARLEY

I'll never forget you.

They release - and Carley backs up into the darkness. Mary watches her go, then returns her attention to the audience.

Her fellow engineers filter in and they, too, face the audience.

MARY

With the launch of Explorer 1, America entered the space race. It would be the first and only time Hydine would be used in any American rocket. My invention, though significant at the time, would soon fade into obscurity.

*

After making several trips to Japan, Richard and Joe discovered the lens companies had replicated their design

without licensing it. To this day they have never received one penny in royalties.

*

As a result of leaving behind a briefcase full of secret documents at a bar in Los Angeles, Irving was fired from his job at North American Aviation. In order to get his job back he studied law and became an attorney. His lawsuit against North American failed, and a year later he began work as a criminal defense attorney. In 1972 Judge Charles Older of the Los Angeles Municipal court assigned Irving Kanarek to be the leading defense attorney for Charles Manson. Vincent Bugliosi would later refer to him as the "Toscanini of Tedium."

*

Richard spent forty years working in the space industry, participating in every major project; Redstone, Mercury, Gemini, Apollo and the Space Shuttle. He never again played football in the Rose Bowl.

*

As for myself, after fifteen years in the aerospace business I retired to become a full time wife and mother. In January, 2005, after fighting numerous illnesses related to thirty years of smoking, I passed away. My family's attempts to convince the Los Angeles Times to publish my obituary were ultimately unsuccessful. My son was so angered by this, he decided to write this play. As of today,

_____, the Los Angeles
(today's date)

Times still refuses to publish my obituary. My name is Mary Sherman Morgan. I am an engineer.

END.